

RELAXED CREDIT CAN OPEN NEW MARKETS!

INSIDE DOPE

by GEORGE F. TAUBENECK

Stories of the Week
Gags of the Week
Philosophy of the Week
What Price Incentives?

Stories of the Week

Fond father approached President Stoddard (of the University of Illinois) with a proposition.

"My boy, he said, 'doesn't want to waste too much time in college. Can you arrange a short-cut course for him?'"

"Possibly," frowned Prexy Stoddard. "However, you should remember that it takes many years to grow a sturdy oak tree, although we can produce fine pumpkins in three months."

Time after time an auto mechanic was called to a suburban home to help a woman start her vintage car.

And, on each occasion, he found nothing wrong with the sturdy old motor. He could get it going easily.

With a flash of inspiration he ordered the suburbanite to start the Buick herself. She did—drove it half a block—then pulled out the choke, and hung her purse on it.

"Sorry to hear your daddy has been ill. When will he be able to work again?"

"Mama says it may be a long time, on accounta compensation has set in."

Gags of the Week

It's a great life if you weaken in time to enjoy it.

"A wise woman makes her husband think he's head of the house when he's only chairman of the entertainment committee."—*American Horologist & Jeweler*.

Called up before his draft board, a young married man brought along his wife—to prove that he had poor vision.

"Weak coffee probably has caused more divorces than strong drink."—*Grit*.

"When your ship comes in, the Government sees that it is docked."—*Irish Digest*.

News item from California reveals that a baby daughter out there has eight grandparents and four great-grandmothers.

Lucky girl! She's a cinch to escape the dismal fate of scientific rearing.

Philosophy of the Week

"To begin looking for things that are wrong in to succeed in the search; to start out looking for the things that are right can also result in a successful search. Looking for the wrong things does one thing to us, while looking for the right things does something else and very different."—ROY L. SMITH, *Christian Advocate*.

"Change isn't necessarily improvement. Sometimes an old setup is better than a new upset."—*Sales Maker*.

"I am convinced that success is made up of doing the simple things well. I wish that the terrific urge for new methods could be transferred into a desire of equal strength to do the relatively simple things that go into the job of management and do them more efficiently."—CLAUDE E. DUNFEE, *Managers Magazine*.

"A wise man profits by his own experience. A wiser man profits just as much by the experience of others."—*Hoard's Dairyman*.

"Income tax has made more liars out of the American people than golf has."—*Bendzine*. Bendix Aviation Corp.

"When you get rid of the idea that your mission is to regulate other (Concluded on Page 8, Column 1)

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All Restrictions Off on Credit Terms, Trade-In Allowances

Banks, Finance Firms Will Set Limits Now

WASHINGTON, D. C.—All installment credit controls have been suspended, in an order by the Federal Reserve Board effective 4:30 p.m. May 7. The announcement issued by the board as of that date stated:

"Effective immediately the Board of Governors has suspended Regulation W relating to consumer installment credit.

"This action was taken after careful review of developments in the economy generally and in the markets directly affected by the regulation. The board has recommended to the Congress that authority for the regulation of consumer credit be continued after June 30 so that it could be reinstated should subsequent developments necessitate such action."

(This latter statement confirms a prediction published previously in the NEWS that the board might modify or suspend credit controls but would seek the authority to impose such controls whenever it saw fit, in any extension of the Defense Production Act.)

Suspension of Regulation W means that refrigerator and appliance dealers may now, if they wish to:

1. Sell on a "no down payment" basis and give the customer as long to pay the balance as the dealer wants.
2. Offer any kind of allowance for trade-ins.

Actually, such wide latitude in credit terms and trade-in allowances will probably be possible only for those appliance retailers who handle their own paper.

Appliance dealers, who had been fighting for a revocation of Regulation W for some time, expressed the feeling that the suspension of the credit restrictions will be a "shot in the arm" for the business, particularly in sales to the lower income groups. Reflecting this attitude, C. T. Lawson, vice president in charge of Kelvinator sales, declared:

"We believe this move will provide a needed stimulant to the major appliance business through increased sales to the lower income market."

The move caught most banks and finance companies by surprise and few of them were ready with any plans for a "no controls" period of financing. Those who did say anything, however, were cautious in their statements and indicated that they might liberalize their terms to possibly 10% down and 24 to 30 months to pay.

A spokesman for General Motors Acceptance Corp. said that on appliances GMAC "might stick to 15% down but will probably allow 24 months to pay."

C.I.T. Financial Corp., claiming to be the largest independent auto trade-ins.

Lehman New Sales Chief at Frigidaire

DAYTON—Appointment of Herman F. Lehman to succeed Philip M. Bratten as general sales manager of Frigidaire Div., General Motors Corp., has been announced by Mason Roberts, general manager.

Bratten has been granted an indefinite extension of his leave of absence. He has been on leave for the past six months because of illness, but his health is improving rapidly. A veteran of 36 years with Frigidaire, he has served as general sales manager for 10 years.

L. A. Clark will continue as assistant general sales manager, but with new and broader duties and responsibilities.

Lehman has been assistant general sales manager for nearly 10 years. In June, 1925, he joined Frigidaire as a member of the Service Technical department and in January, 1926, was made service supervisor and in-

(Concluded on Page 4, Column 5)

New Carrier 'Cub' Ice Maker Produces 200 Lbs. Of Cubes or Crushed Ice

CHICAGO—A new 200-lb. Carrier "Cub" automatic ice maker—"designed specifically to meet requests from users of cubes and crushed ice"—was unveiled by Carrier Corp. at the National Restaurant Exposition here.

Carrier officials said the new machine was built to specifications set up by hundreds of interviews with operators of hotels, restaurants, hospitals, taverns, supermarkets, meat

(Concluded on Page 4, Column 4)

2 Refrigerators, One Freezer Model Price Cut by Kelvinator

DETROIT—Price reductions on two Kelvinator refrigerators and one freezer model in the popular price range have been announced by C. T. Lawson, vice president in charge of sales.

The two refrigerators were the 7-cu. ft. NH, reduced from \$268.50 to \$254.95, and the 8-cu. ft. EH reduced from \$312.50 to \$299.95. The 9-cu. ft. freezer model F-R 93 was reduced from \$399.95 to \$359.95.

These prices are suggested retail prices and include 5-year protection plan on the sealed refrigeration mechanism.

U. S. Court Extends Capehart Ruling to Wholesaler, Retailer

WASHINGTON, D. C.—The U. S. Emergency Court of Appeals ruled last week that wholesalers and retailers are entitled to the same price relief now extended to manufacturers under the Capehart Amendment to the Defense Production Act.

Dismayed Office of Price Stabilization officials immediately prepared to ask the U. S. Supreme Court to reverse the decision. OPS officials protested that the decision would "make a mess" of the agency's retail price regulations.

However, no change in policies is expected until the Supreme Court either acts upon the case or declines to review it. OPS has until June 4

(Continued on Page 4, Column 3)

Servicemen View New Methods, Aids At Phila. Exhibits

PHILADELPHIA—Marked by many new types of educational exhibits and equipment demonstration devices, the Eastern Regional Refrigeration & Air Conditioning Educational Exhibit and Conference had a three-day run here May 2-4, with servicemen and contractors from the surrounding area in attendance.

With many operating and cutaway models being put through their paces, and elaborate display boards with carefully painted or lighted flow diagrams showing the action of various controls and accessories in refrigeration systems, the conferences served to sharpen the techniques of those attending.

Personnel were kept busy answering the many questions put to them by refrigeration servicemen, covering modern methods, tools, and techniques.

ATTENDANCE FROM EASTERN STATES

The conference drew a pretty good attendance from upstate Pennsylvania communities and there were delegations from Maryland and the New England states. The attendance from the Philadelphia and New York metropolitan areas was possibly not as high as had been anticipated.

The educational talks held in conjunction with the conferences were on current and pertinent subjects, and evoked considerable discussion.

In his opening talk on "The Use of the Suction Pressure Recording Gauge in Diagnosing and Analyzing Service Problems," John Spence, service manager, Husemann Refrigerator Co. and chairman, Educational and Examining Board of RSES, warned servicemen that they must modernize their methods and use up-to-date instruments and tools for their diagnosis.

"You wouldn't go back to a doctor who just thumped you around a bit, put his head to your heart to listen to the beat, and who took a casual look in your mouth without using proper lighting or instruments."

"No, the modern doctor uses an array of up-to-date instruments designed to enable him to use modern methods of diagnosing human ailments."

MUST USE MODERN AIDS

"So should the refrigeration serviceman use modern instruments designed to enable him to use modern methods in diagnosing the ills of a refrigeration and air conditioning system."

"Many servicemen are today diagnosing faulty systems by ear. Recently I asked a veteran service engineer, who was doing the maintenance on a lot of expensive equipment, why he wasn't checking them with a pressure gauge and found out that not only didn't he have one, but he hardly knew what the device was or how to use it."

"Today's serviceman must learn what these new instruments and tools are—and how to use them."

Other principal talks at the Philadelphia conference included "Freon-22," "From the Installer's and Serviceman's Viewpoint" by R. L. Williams, Kinetic Chemicals Div. of du Pont; "Lowside Pressure Limiting Valves" by William F. Wischmeyer, chief engineer, Sporlan Valve Co.; "Motor Starts for Refrigeration and Air Conditioning" by Kenneth M. Nelson, industry specialist, Cutler

(Concluded on Page 30, Column 1)

Freezer Sales In Some Sections Top the List

Pass Refrigerators In Ariz.; Deepfreeze Backs Plan If Some Rules Are Followed

DETROIT—History was made, so to speak, when sales reported by 33 dealers in the Phoenix, Ariz., area shot food freezers into the top spot in major appliance volume during March.

It was the first time in "Valley" history—and perhaps the first time any place where records have been kept—that the sales of refrigerators were surpassed by home freezers. A total of 721 freezers produced a volume of over a quarter-million dollars, according to Appliance Merchandisers Association in Phoenix.

"The margin was a substantial 120 units," the association said. Total sales to date of 1,384 is 70% of the 1951 annual sales."

The AMA also reported that approximately 75 freezers were sold during its three-day second annual Food Freezer Fair, and that freezer sales have boomed as a direct result.

These cheering reports came in as the freezer-food plan continued to hold the interest of the whole industry. Most recent developments were these:

In a statement on this promotional program, L. J. Sorensen, vice president of Motor Products Corp. and general manager of its Deepfreeze Home Appliance Div., said he believes a "thoroughly realistic home freezer-food plan provides the basic answer to better and more economical living at reduced cost."

Sorensen also commented on the type of food plan which his company (Concluded on Back Page, Column 1)

FRB Action Seen as Boon To Commercial Field

WASHINGTON, D. C.—An upswing in commercial refrigeration and air conditioning business was seen resulting from the recently announced suspension of government restrictions on financing of new store construction and modernization.

The Federal Reserve Board suspended indefinitely its voluntary credit restraint program under which loan applications were screened by regional committees. However, the board put the credit restraint organization on a standby basis so the program can be reinstated if necessary.

The program, launched in March, 1951, called for lending institutions to limit loans to defense and essential civilian projects. Thus, it became difficult for retail outlets to obtain funds for modernization and expansion.

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Steaks So Good, Restaurant Owner Sells 'Em Raw



CUSTOMERS DEMANDED the privilege of taking his good steaks home with them, so Nicholas Manero, Greenwich, Conn. restaurant proprietor started to merchandise them, installing Shor-Gillatt meat display cases, even putting a couple of them in his window.

Restaurant Uses 24 Ft. Of Meat Display Cases

GREENWICH, Conn.—Five and one-half years ago Nicholas Manero started a restaurant here, featuring steak dinners. As his reputation for good steaks grew, Manero found his customers were demanding the privilege of buying steaks to take home.

Rather than handle such business haphazardly, Manero started a retail meat market and installed 24 ft. of Shor-Gillatt display cases for a full line of meats. His operation is now one of the largest retail meat businesses in the Greenwich area. Of course, he's still serving those good steak dinners.

Appliance Dealer Fined For Reg. W Violation

SYRACUSE, N. Y.—The United States District Court here recently fined Economy Appliance Co., Inc., of 394-396 Broadway, Albany, N. Y., \$1,000 for violating Regulation W. The corporation had entered a plea of guilty.

To Cool Chattanooga Office

CHATTANOOGA, Tenn.—Office area of a three-story building being constructed here for Seminole Flavor Co., which manufactures the Double Cola concentrate used by bottlers of that drink, will be air conditioned, it is announced.

Leading 'Em In

Ice Cream Merchandisers Just Inside Door Boost All of Drug Store's Sales

BUFFALO—Self-service ice cream merchandising is big business at Lee's Drug Store in the L. B. Smith Plaza here, with three large self-service freezers spotted just inside the main entrance, convenient for the thousands of shoppers who patronize the plaza daily.

Two of the freezers are devoted to packaged ice cream while the third features all types of novelties, such as ice cream suckers, popsicles, and ice cream sandwiches.

Signs on each of the freezers instruct customers to pay for their ice cream at the tobacco counter further back in the store.

It is found that shoppers stopping for ice cream become good prospects for the sale of a wide variety of other merchandise, since most of them start browsing in the self-service store after picking out ice cream.

By the same token, many shoppers entering the store for other merchandise, pick up an item from one of the ice cream freezers before they leave.

Covington Distributing Has Admiral Products in Houston

CHICAGO—Covington Distributing Corp., Houston, Texas, has been appointed the Admiral distributor in Houston, according to W. C. Johnson, vice president and general sales manager of Admiral Corp.



R. L. SEARS

Lynch Elects R. L. Sears Vice President of Firm

TOLEDO—Following the recent annual meeting of stockholders of Lynch Corp., the directors elected Russell L. Sears a vice president of the company, it was announced here.

Sears came to Lynch in 1944 as sales manager of its Compressor Div. and was promoted last year to general sales manager of the Ohio divisions of the corporation, supervising sales of "Par" air compressors, Par refrigeration units, and packaging machines.

Prior to his connection with Lynch, Sears was sales manager of the automotive division of Sherwin-Williams Paint Co. He will continue to base his duties at the company's Toledo office.

At the stockholder meeting, the seven directors of the company were re-elected. The directors, in addition to electing Sears to a vice presidency, re-elected U. Z. McMurtrie, chairman of the board; F. K. Zimmerman, president; T. C. Werbe, Jr., vice president; A. G. Doll, vice president; and J. H. McGivern, secretary-treasurer.

How Cooling Benefits Industry Outlined In New Kinetic Booklet

WILMINGTON, Del.—"Kinetic" Chemicals Div. of du Pont has announced publication of a 16-page booklet telling how air conditioning and refrigeration benefit industry by increasing production, improving products, and lowering costs.

The illustrated booklet contains 24 case histories on plants in various industries where air conditioning or refrigeration was used to solve some manufacturing problem. There is also information on other industrial applications in which air conditioning or refrigeration proved to be of help.

The booklet cites applications in the optical, metalworking, automotive, aircraft, bearing, food, photographic, communications, confectionery, glass, printing, refrigeration, textile, rubber, and pharmaceutical industries. Also covered are uses in industrial research, precision control, and testing laboratories.

Treble Damages Asked Of Holland Furnace Co. In OPS Price Action

WASHINGTON, D. C.—Holland Furnace Co. has been charged by the Office of Price Stabilization with many over-ceiling sales of heating units in cities and towns in New York state.

The OPS injunctive and treble damage actions were filed against the company in the U. S. District Court, Western New York District.

According to OPS, the Holland, Mich., concern charged over-ceiling prices for heating units and installations or services in 137 cases in the Rochester area and 46 cases in the Buffalo area. Actual overcharges in the Rochester cases were \$11,260.91 and the Buffalo area \$3,036.69, according to OPS which is asking the court for treble damages of \$42,892.80 on overcharges totaling \$14,297.60.

The action is an open-end complaint to permit continued audit of the company's accounts and an increase in treble damages if additional overcharges are found. OPS is also asking for an injunction to restrain the firm from future violations.

'Defrost Package' Unit Ready To Be Installed Developed by Lehigh

PHILADELPHIA—To simplify installation of automatic defrost systems, Lehigh Mfg. Co. has devised an "automatic defrost package," it was revealed during the Ninth All-Industry Educational Conference and Exhibit held here.

The "package" consists of two basic pieces: a complete Lehigh reverse cycle hot gas defrost condensing unit and a low temperature blower coil (Recoil) with heated drain pan. Both pieces are shipped completely wired and fitted. Installation involves merely placing the condensing unit, hanging the coil, running the normal liquid and suction lines plus drain, and charging the system.

The blower coil has the thermostatic expansion valve mounted, capillary tube in place, drier and check valve installed, and the heated drain pan piped in series with the evaporator suction outlet.

Supplied on the condensing unit is Lehigh's four-way reversing valve; low pressure control for on-off cycling of the machine; a fan delay control which prevents the fan from starting up after defrost until evaporator is down to temperature; a time-pressure defrost control which starts the defrost cycle at any pre-set time but stops it when the pressure rises to indicate that defrosting is completed; automatic expansion and check valves; double dip tube receiver, and pilot solenoid to actuate the reversing valve.

These defrost condensing unit-blower coil "packages" are being made available in 1 to 3-hp. sizes for applications below 32° F.

FOGEL

The Only Original

"ANGLE VISION"

FASTEST SELLING FROZEN FOOD MERCHANDISER ON THE MARKET... *Successor to the Flat-Top*

Originated and Manufactured Exclusively by

FOGEL

BUILT UP TO A STANDARD NOT DOWN TO A PRICE!

Priced to Clinch Sales

5 YEAR WARRANTY

The FOGEL "Angle Vision" Freezer is backed by a 5 YEAR COMPRESSOR GUARANTEE! All materials and workmanship are unconditionally guaranteed for quality and backed by over a half century of FOGEL dependability.

Only "ANGLE VISION" Has All These Features:

MULTI-USE—Self-Service frozen food and ice cream merchandiser; check-out counter and display top; long rack in rear; can be nested in shelving against wall.
ANGLE-VISION FOR GREATER VISIBILITY—More visibility means more frozen food sales. "Angle Vision" is a completely original design.
FULL LENGTH REFLECTING MIRROR and fluorescent lighting doubles buying appeal.
USERS REPORT UP TO 200% INCREASE in frozen food sales.
IDEAL FOR SPACE-CRAMPED STORES where no other freezer could fit.
FOUR MODELS—Utilized or remote types to meet all needs.
FIELD TESTED FOR 10 YEARS—Your assurance of dependability. Protect your sales—protect your profits.
CUSTOMER ACCEPTANCE—An established market. Leads developed through national consumer advertising.

Prompt Delivery

CONTINUOUS PRODUCTION ASSURES "ON TIME" DELIVERY. NO DELAYS. NO LOST SALES.

FOGEL

REFRIGERATOR COMPANY

Manufacturers of Quality Commercial Refrigeration Since 1899
 3400-A EADOM ST. PHILADELPHIA 27 PA.

Refrigeration Engineer Wanted

We are the merchandising consultants for one of the nation's leading manufacturers of home equipment. Our client is preparing to hire a thoroughly qualified refrigeration engineer with substantial experience in both design and application phases of comfort cooling. Permanent employment with unlimited opportunity is available to the right man. Compensation will correspond with the capacity and stature of the individual hired. If this position interests you, write us a complete resume of your education, experience and qualifications, which will be held in strict confidence. If your letter interests us, we will arrange for a personal interview. Send all inquiries to Box No. 3994, Air Conditioning & Refrigeration News.

Here's actual photographic proof of superiority of the *Magic Cycle* SELF-DEFROSTING KELVINATOR



Peaches, raspberries, blueberries—all high-negat, easily-refined foods, at start of Kelvinator defrosting cycle.



Brief defrosting later. Frost is melting, but all fruits are still brick-hard, thanks to Kelvinator's constant cold.



Now, practically all frost is gone, but there's no change in the fruits. Here's really soft automatic defrosting!



Defrosting completed. Frosting starts again. Fruits unchanged. Photographic proof of Kelvinator superiority!

**THE REFRIGERATOR THAT DEFROSTS
AUTOMATICALLY WITHOUT
HOT ELECTRIC ELEMENTS!**



THERE IS A BETTER REFRIGERATOR...



MOST PACKAGES OF FROZEN FOODS caution you against letting them thaw and then refreeze. This will never happen in your "Magic Cycle" self-defrosting Kelvinator, for this is the first refrigerator that defrosts automatically without hot electric elements.

Since it uses no such elements, the "Magic Cycle" self-defrosting Kelvinator defrosts at colder temperatures. Thus frozen foods stay far below freezing even during defrosting. It is faster, simpler, far more economical... and completely safe for foods, the refrigerator and you. Right now, your old refrigerator is worth more on a trade-in than it will ever be again. So look up the name of your Kelvinator Dealer in your Classified Phone Book. Trade-in your old refrigerator and start enjoying a new "Magic Cycle" self-defrosting Kelvinator!

Think of having all this—

- In place of your present refrigerator!
- In place of two small, cramped spaces, you get 11 cu. ft. of cold space... cold-clear-to-the-floor!
- In place of a crowded, ice-free freezer chest, you get a giant, 43-lb. ice-free freezer!
- In place of too-hard or too-soft butter, you get a portable Butter Chest accessory that keeps butter perfectly!
- PLUS the convenience of huge shelf space, Handy Door Shelves, giant Crispers, New beauty and dependability, too!

*Patent applied for.

IT'S *Kelvinator*

Division of Nash-Kelvinator Corporation, Detroit 32, Michigan

In "MAGIC CYCLE", There's Real Sales Power!

FULL-COLOR magazine messages... large-space newspaper advertisements... point-of-sale displays... are combining to bring home to millions the full significance of the greatest refrigeration advancement in years—the sensational "Magic Cycle" self-defrosting Kelvinators.

Here is a story packed with sales power and presented by a challenging "Proof-Time" campaign that covers every base from national advertising right through to sales closing materials for use on the salesroom floor—all designed to turn prospects into

buyers for Kelvinator dealers.

Retailers across America are building sound sales activities on Kelvinator's "Proof-Time" Campaign, and day after day these activities are achieving profitable sales in volume in today's market.

Yes, there's sales magic in "Magic Cycle"... product plus promotion... a potent reason why the Kelvinator franchise is the most valuable in the appliance industry.

*Patent applied for.

THERE IS A BETTER REFRIGERATOR...

IT'S *Kelvinator*

THE MOST VALUABLE FRANCHISE IN THE APPLIANCE INDUSTRY
ELECTRIC REFRIGERATORS... RANGES... FREEZERS... WATER HEATERS... AIR DRIERS

KELVINATOR • DIVISION OF NASH-KELVINATOR CORPORATION • DETROIT 32, MICHIGAN

RESULTS in MINUTES ...NOT HOURS!

Thawzone starts to eliminate moisture as soon as it mixes with the refrigerant. Time is not lost waiting for the refrigerant to pass through a cartridge many times. You are able to put the unit back into operation promptly without further freeze-ups.

1. Thawzone reaches all parts of the unit. 2. Actually destroys moisture... not a mere antifreeze. 3. A patented invention... cannot be copied. 4. No pressure drop possible. 5. Not subject to oil clogging. 6. Neutralizes acids and prevents corrosion. 7. Costs less. Only about \$6 per lb. of refrigerant treated. 8. One product for all "Freon" and methyl units. 9. Only 1/4 oz. per lb. of refrigerant required.

THAWZONE

THE LIQUID DRIER

AIR CONDITIONERS

3 to 50 Ton Units complete
with evaporative condensers

BAL-AIR MANUFACTURERS

P. O. BOX 576
COLUMBIA, S. C.

Capehart Ruling--

(Concluded from Page 1, Column 3) to file its appeal.

Since the high court ordinarily recesses for the summer around June 12, price controllers hope to get the case carried over until next fall, according to one report. This source said:

"Any delay will give the OPS time to make plans for handling what it believes might prove to be a 'tidal wave' of applications."

The appeals court issued its ruling in a case brought by Safeway Stores, Inc. The decision upheld Safeway's contention that grocers are eligible for higher ceilings on canned goods, flour, syrup, jellies, and a number of other items.

The ruling came as a surprise not only to OPS but to Senator Capehart, sponsor of the amendment. He said it was Congress' intention that the amendment "was to apply to manufacturers and processors only." This is how it has been interpreted by OPS.

The Capehart clause permits the applicant to base his ceilings on his highest prices during the first half of 1950 plus all cost increases up to last July 26. But it does not specify who is eligible to apply.

Chief Judge Maria said the amendment applies to "any material (other than agricultural commodities)." This, he stated, "is the broadest kind of definition and plainly includes materials sold at wholesale or retail."

Judge Maria asserted: "It is true that the result may not be what some members of Congress expected. It may to some degree interfere with the use of dollar-and-cents prices and

standard markups for wholesale and retail sellers. But we are not convinced that this is a result which is so plainly at variance with the policy of the legislation as a whole that we must construe the language other than as Congress wrote it."

Reg. W Relaxed--

(Concluded from Page 1, Column 3) financing company, announced that the maximum maturity on sales of new cars and cars less than three years old is extended from 18 months to 24 months. C.I.T. will continue to require a one-third down payment on cars, and on sales of cars three years or more of age, the current requirements of one-third down and 18 months to pay will stand.

The loan officer of a large New York banking institution said that bankers would be concerned if dealers went wild on "no down payment offers," and declared that "we still have to decide whether we handle small down payment business."

There were some dissents to the feeling that suspension of the regulations would be all good. An official of a big chain of New York City appliance stores was quoted as saying:

"We don't expect it to make any difference. Most stores don't handle their own paper—and I expect banks now to check credit even more closely than they have in the past. If competition forces us, we may advertise no down payment. That'll get more people in the stores, but that's all. Anybody who comes in to buy without money will be disappointed. We liked Regulation W, because we like down payments—it's the only way to get a decent credit risk."



EASE of handling new door on Carrier Corp.'s 200-lb.-a-day ice making machine is demonstrated to H. J. Prebensen, president of Temperature Equipment Corp., Chicago, at the Restaurant Convention and Exposition. The door simply drops down and rests on brackets which hook over bottom of the opening.

Carrier Ice Maker-- Lehman, Clark--

(Concluded from Page 1, Column 2) markets, drug store fountains, and other locations where ice is employed.

"A substantial number indicated a definite need for a machine like Carrier's 450-lb.-a-day ice maker—introduced several years ago—but in a smaller capacity and fitting even more limited space requirements," the company asserted.

The Cub is now in production and will be immediately available throughout the country at Carrier dealers.

The new machine, like the larger one, may be obtained in a combination model with a factory built-in crusher for production of either cubes or crushed ice at the turn of a knob.

Models of this type are supplied with a divided bin, and the machine automatically deposits cubes in one section and crushed ice in the other. Three grades of crushed ice from fine to coarse are available by turning another knob.

The machine produces only the amount of ice needed, shutting itself off when the bin is full.

"In addition to providing a completely sanitary supply of ice in the amount needed at the most convenient location for scooping it up, the new machine can save upwards of \$1,000 a year over the cost of ice brought in from outside, according to estimates," Carrier declared. "The machines makes 40 lbs. of either cubes or crushed ice for about 6 cents in electricity and water cost at normal rates."

Cub ice makers are available with 100, 160, or 240-lb. storage bins. With the 100 or 160-lb. bin, the ice maker occupies a space about 2 ft. square, or about the same as the average candy or cigarette machine.

Iron Fireman Purchases Petro Oil Burner Business; Crews Heads Sales

CLEVELAND—Kenneth G. MacCart, president of Petroleum Heat & Power Co., Stamford, Conn., and William J. O'Neil, chairman of the board of Iron Fireman Mfg. Co. here, announced that Iron Fireman has purchased the Petro oil burner business.

The entire line of Petro domestic, commercial, and industrial oil burners and oil heating equipment will be manufactured in the Iron Fireman Cleveland plant.

Headquarters of the Petro oil burner division will be moved to Cleveland, becoming the Petro Div. of Iron Fireman as of June 1.

J. R. Crews has been appointed sales manager of the Petro Div. and will have charge of Petro field sales operations under the direction of C. T. Burg, Iron Fireman vice president in charge of sales.

The Petro sales organization will remain entirely separate from that of Iron Fireman. Petro equipment will be sold through the jobbers handling Petro, and also through the retail branches of the Petroleum Heat & Power. No Petro equipment will be sold through Iron Fireman dealers or branches, and no Iron Fireman equipment will be sold through the Petro sales organization.

(Concluded from Page 1, Column 2) structor on the West Coast. Six months later he was made assistant service manager and became service manager in 1928.

In 1932 he was made commercial sales manager and, in 1934, was appointed manager of Frigidaire's St. Louis branch. He returned to Dayton in 1939 as manager of the commercial and air conditioning division and, since 1943, has been assistant general sales manager.

Clark joined the Frigidaire organization in 1929 as a sales promotion specialist and, by 1933 was sales promotion manager. Less than a year later he was made advertising and sales planning manager and, in 1943, was appointed assistant general sales manager.

Pittsburgh Firm Appointed To Handle Revco Freezers

DEERFIELD, Mich.—Superior Distributing Co., Pittsburgh, has been appointed distributor of "Chill Chest" freezers, manufactured by Revco.

Max Bloom is president of Superior, which will cover 11 counties in Pennsylvania, 10 counties in West Virginia, and two in Ohio.

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profitably

with the original

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ATTENTION MANUFACTURERS!

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ASSEMBLIES
ANY SHAPE OR SIZE
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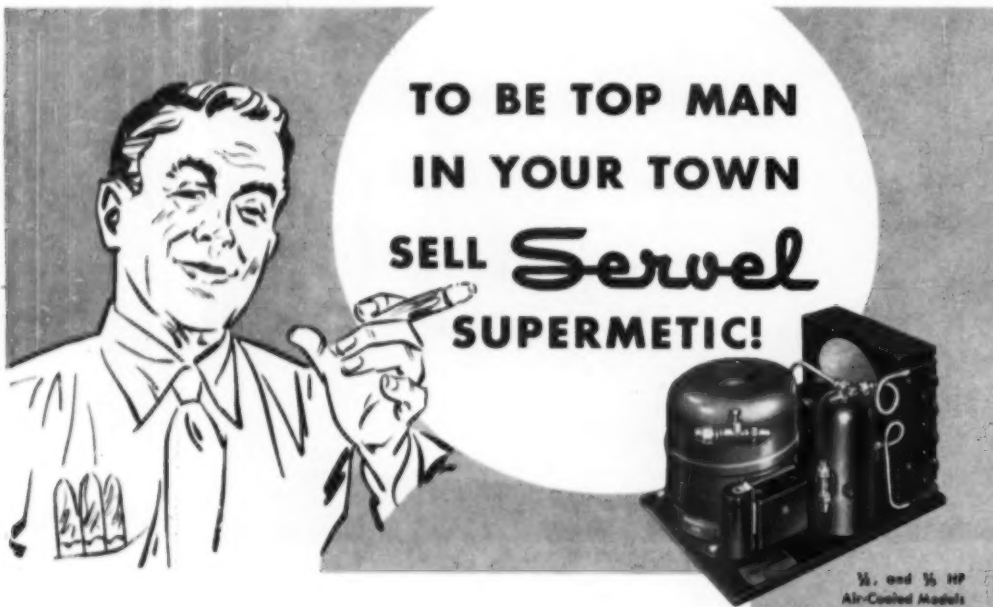
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CASE COILS AND
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* Unit Coolers * Unit Heaters

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PHILADELPHIA 46, PA.



To make more money now — and at the same time build solidly for the future — sell Servel Supermetics for all commercial electric refrigeration jobs — new installations or replacements.

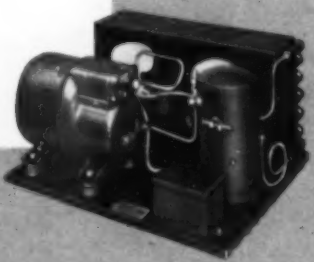
With a wide selection of sizes to draw on, you're sure of "built-to-order" efficiency for every installation: Compact, power-packed air-cooled and water-cooled electric condensing units... ranging in size from 1/4 to 3 H.P. for medium or low temperature installations. Besides the protection of Servel's performance-proved quality, both you and your customer have the further protection of Servel's factory-extended Warranty.

Your nearby Servel wholesaler has full lines of Servel Supermetics, all other items you need, and will give you free application assistance to help you select the proper unit for the job.



1, 1 1/2, and 2 HP Air-Cooled;
also in Water-Cooled Models
1 HP through 3 HP

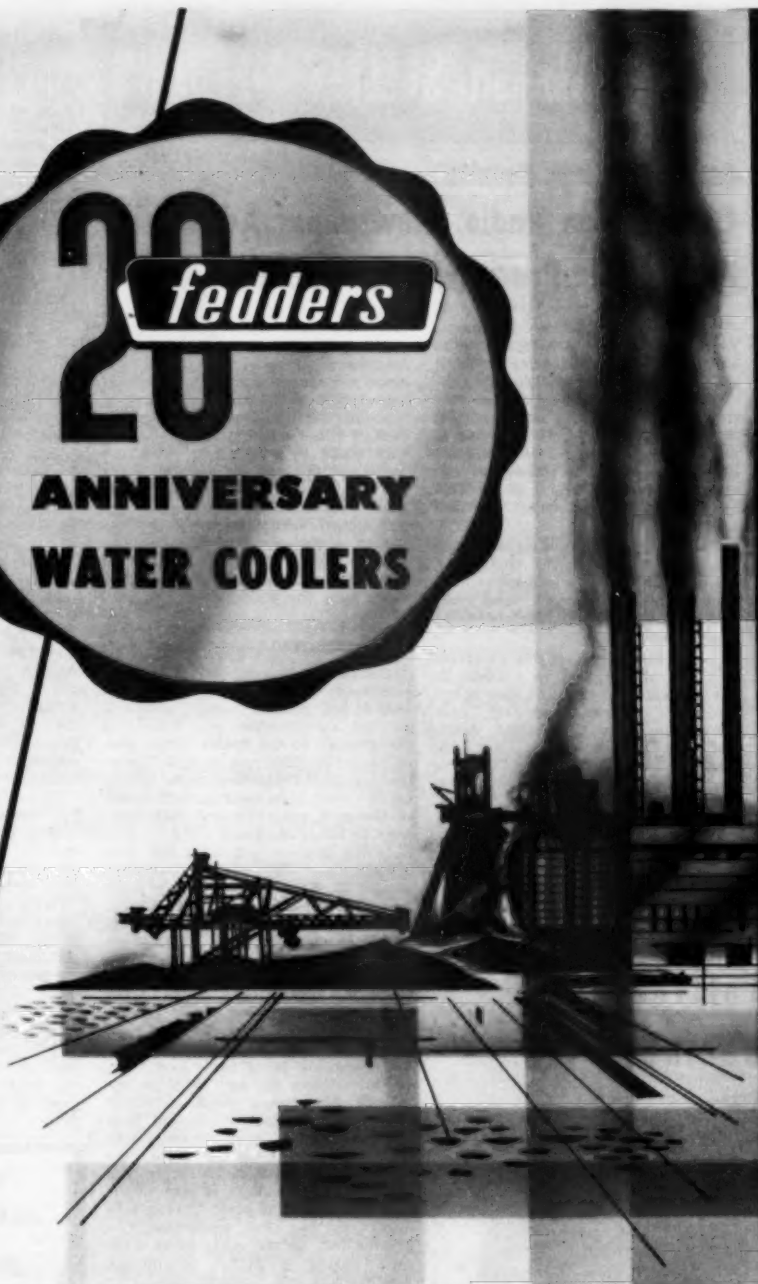
1/2, 3/4 and 1 HP
Air-Cooled Models



1/2, 3/4 and 1 HP
Water-Cooled Models

WRITE TODAY
FOR
FULL INFORMATION
ABOUT SERVEL AND
NAME OF YOUR
NEAREST
WHOLESALE

SERVEL, INC., ELECTRIC REFRIGERATION DIVISION, EVANSVILLE 20, INDIANA



Essential for Defense Production

Men who sell Fedders Electric Water Coolers are finding that it is a multi-sale and profitable business.

Fedders Electric Water Coolers are built in popular sizes . . . priced competitively . . . and sold with a 5 year protection plan.

Essential for defense, civilian, institutional and government, . . . the market is wide open. Minimum inventory and freedom from consumer finance and credit worries.

Fedders Water Coolers are made in standard and explosion-proof bubbler types with air and water cooled condensers, as well as bottle types. Why let Fedders Water Cooler profits pass your door?

**MAIL THIS COUPON AND GET THE FACTS
ON FEDDERS WATER COOLERS**

FEDDERS - QUIGAN CORPORATION

57 Tonawanda St., Dept. AC-12

Buffalo 7, N. Y.

Send me complete information on Fedders Water Cooler
setup for profits in 1952.

Name

Concern

Street

City State

This Appliance Store Is Not a Drive-In, Dominic!

BUFFALO—Between \$10,000 and \$15,000 damage to the store and about 30 electrical appliances was caused when an auto crashed through the display window of Niro Appliances here early one morning recently.

The driver, Dominic L. Meel, told police he lost control of his car. It crossed the street, jumped the curb, and plowed through the glass-and-brick front, scattering television sets, electric ranges, and other appliances. Meel was charged with failure to keep his car under control.

The only part of the car sticking outside when it came to a halt was the tail light," said the patrolman. Louis Niro, owner of the store, said the car broke through the 2-ft.-high brick front, shattered an 18 ft. by 8 ft. plate-glass window.

G-E Names 6 Officials for Appliance Control Dept.

MORRISON, Ill.—Six key management positions in the General Electric Co.'s newly created Appliance Control Department were announced here recently by John C. Helges, general manager of the department.

They are: Philip Gomez, Jr. as manager of sales; Arnold Dunn as manufacturing engineer; James M. Clark as manager of finance; Alden L. Thomas as superintendent of the Morrison Plant; Thomas J. Kelly as design engineer, and James H. McDuffie as supervisor of personnel.

Baby Photo Contest Promotes Washer Sales

SYRACUSE, N. Y.—A Baby Picture Contest proved to be a good traffic puller and prospect builder at the Egan & Blasing appliance store at 839 W. Genesee St.

The store worked out a deal with a local photographic studio to stage the promotion. Mothers throughout the Syracuse area were invited to bring their babies to the store and have them photographed—without charge.

The mother received a photo free and the picture at the same time was automatically entered in the store's Baby Picture Contest. The winner of the contest received the grand prize of a Bendix ironer.

Mothers were invited to call the store for an appointment to have the photo taken.

The promotion was aimed primarily at stimulating interest in Bendix automatic washers which were displayed on the floor near the photographing spot. Mothers were invited to see the washer in action while visiting with their babies.

Christensen, Crockery In New Gibson Sales Posts

GREENVILLE, Mich.—F. L. Sacha, manager of Gibson sales, Gibson Refrigerator Co., announced appointment of J. B. Christensen as divisional sales manager for the Kansas, Missouri, Oklahoma, Arkansas area.

Assignment of J. B. Crockery to manager of building and government sales was also announced. Crockery is taking over Christensen's duties.

specialty SELLING METHODS

Gets Immediate Results

Combination Radio, Newspaper Advertising Proves Best Promotion for Appliance Dealer

LINCOLN, Neb.—Used appliances were selected as a medium with which to test the efficiency of radio spot advertising by the Hardy Furniture Co. here. Results were so outstanding that local radio station KFOR was awarded second prize in the first annual "Radio Gets Results" contest staged by the Broadcast Advertising Bureau, Inc., it is reported by Advertising Manager Russell Dodds of Hardy's.

The award was made in the home products division of the contest on the basis of the large amount of used appliances the Lincoln firm had moved, using only commercials on the 8 a.m. newscast.

Dodds explained that his company was one of the first in Lincoln to use radio advertising and had sponsored the 8 a.m. newscast over KFOR for more than eight years. The firm is the oldest consistent sponsor of such a program. This particular newscast, incidentally, has the highest Hooper rating of any in Lincoln, with 64.5% of the potential audience, and is made up of approximately 40% local news and 60%

state, national, and international.

Hardy's was well aware of the effectiveness of radio advertising, but since newspaper and radio advertising always had been coordinated, it was difficult to measure the effectiveness of either medium. The radio test was made in cooperation with the radio station, and for six days only the daily newscast was used to promote the clearance of used appliances which had accumulated as the result of a trade-in promotion in connection with the store's new Hardy's Annex opened last summer about a block from the main store.

MARKUP 'PROFITABLE' PROMOTION COST LOW

During the week, the store sold practically all the used appliances that it had set out to clear. Markup on the merchandise was listed as "profitable" to the dealer, while cost of the promotion was termed "lower than usual." No prices were quoted on the used merchandise, and theme of the spot announcement was "savings to the customer."

Dodds pointed out that his firm spends about 25% of its advertising budget on radio, including three daily newscasts—one at 8 a.m. over KFOR, another at noon over KOLN, and the third at 6 p.m. over KIMS. Five one-minute spots also are being used daily over KOLN. Newspaper ads account for approximately 60% of the budget and direct mail and miscellaneous for the remaining 15%.

As an example of another successful promotion using radio last year, the advertising manager cited an appliance department event in which dehumidifiers priced at around \$120 were featured. A large shipment was sold out, and repeat promotion resulted in an over-sale. The store was unable to get enough of the appliances to satisfy demand. Timing was important in this promotion, he pointed out, as the radio spots were used during a period of muggy weather late last summer.

Hardy's does not monopolize the newscasts it sponsors. Each opens with a commercial and closes with a commercial, while on special promotions a few words may be injected into a break in the middle of the program. But in any event, Hardy's name is never used over three times. The firm has gained considerable goodwill on numerous occasions by donating an entire period to some civic or charitable project.

RADIO AND NEWSPAPER ADVERTISING COORDINATED

Dodds also stated that coordination of radio and newspaper advertising has proved particularly effective in selling major appliances. Because the store knows it has a large radio audience, it frequently mentions over the air features to be found in a newspaper ad of the day before or the current day.

Newspapers are the best medium for detailing appliances, including descriptions and prices, he said, but radio spots featuring highlights and brand names add much to the impact of the printed ads.

Hardy's is particular in choosing and keeping the announcer for a radio program it sponsors. Customers frequently come in and ask to see an item that "announcer so-and-so was talking about today," instead of asking for it by brand name or other description, the advertising manager pointed out.

After auditioning to select an announcer for a particular program, the Lincoln store insists on having that announcer stay with the program. The store also insists on having an announcer announce the commercial rather than having the newscaster do it. This lends listener impact as well as maintaining the newscast on a higher scale, the management believes.

Moreover, the store insists that the commercial announcer visit the store and become familiar with the merchandise he is to advertise, rather than getting his information entirely

from the ad script, which is prepared by Hardy's own advertising department.

Dodds added that direct mail also has an important but rather limited place in selling appliances. It is very good when "gimmicks" are used, he declared, but generally ineffectual otherwise. When conditions are right for use of a "gimmick," direct mail can give a bigger return on the dollar than either radio or newspaper.

Norge Div. Appoints Southwest Wholesale In San Antonio, Tex.

CHICAGO—A new Norge distributor, Southwest Wholesale Distributors, San Antonio, Texas, has been appointed, H. L. Clary, vice president in charge of sales, Norge Div., Borg-Warner Corp., disclosed here.

The new distributorship, which will carry the full line of Norge home appliances, was formed by Charles S. Ely, a veteran of more than 20 years in the appliance business, and H. Bradley Sherman, San Antonio businessman.

They have acquired the physical properties of the Rowles Sales Co., San Antonio, former Norge distributorship there, and will operate it under the new name of Southwest Wholesale Distributors. William Rowles, Sr., president of the Rowles firm, is retiring from the wholesale appliance business. He had the Norge franchise for 20 years.

To mark Rowles' long service with the Norge organization, Clary presented Rowles with a plaque citing him for his "outstanding service" in the industry. He also presented him with a lifetime membership in the "Viking Club," Norge sales leadership organization.

The Norge line hereafter will be distributed by Southwest Wholesale Distributors, Inc., at the same address as the Rowles Sales Co.

Mr. Ely has had experience with Norge dating back to sales leadership organization, in 1933. He has been in the major appliance field all his business life, and spent some years with the Dallas distributor for Norge.

NATIONAL LOCK HARDWARE

for reach-in refrigerator cabinets

"THRU-THE-DOOR" 452 SERIES MECHANISM

For Glass Door Applications

Other Handles Also Available (Keylocking Optional)

Write for Particulars

"EDGE-MOUNTED" HINGE

Other Hinges of This Type Also Available

WRITE FOR COMPLETE INFORMATION AND ENGINEERING DATA



NATIONAL LOCK COMPANY

ROCKFORD • ILLINOIS
REFRIGERATOR HARDWARE DIVISION

trade in refrigerators profitably with the original "BLUE BOOK"

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WALL WIRE PRODUCTS COMPANY

A FOREMOST NAME IN THE MANUFACTURE OF DIVERSIFIED WIRE PRODUCTS OF SUPERIOR QUALITY

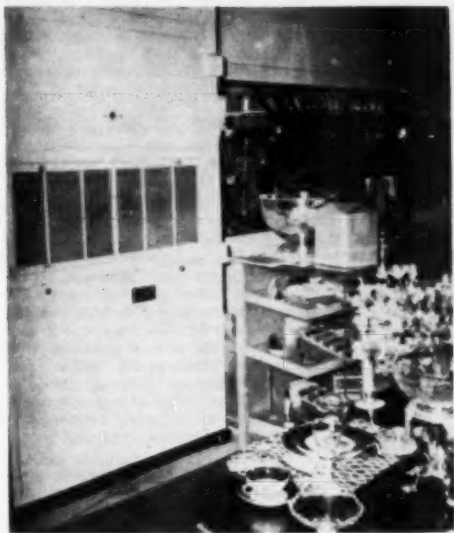
STANDARD AND LIGHT WEIGHT SHELVES OF ELECTRO-POLISHED SOLID STAINLESS STEEL

REFRIGERATOR SHELVES WITH CHROME PLATE, ZINC PLATE, PRO SEAL, TIN, OR PORCELAIN FINISH

WIRE GRILLES • DISPLAY FIXTURES • GUARDS • BASKETS OF ALL TYPES FOR ALL PURPOSES STEEL STAMPINGS • MISCELLANEOUS FORMED AND WELDED WIRE ASSEMBLIES

WALL WIRE PRODUCTS CO. PLYMOUTH, MICHIGAN

AIR CONDITIONING



VALUABLE floor space was conserved by recessing this 5-ton packaged unit into the wall in Ray's jewelry store in Temple, Texas. It was painted same as the wall and neatly furred into it.

Jewelry Store Recesses Packaged Unit Into Wall for 'Neat' Installation

TEMPLE, Texas—The often serious problem of how to air condition a jewelry store with package units without sacrificing sorely-needed space, has been solved at Ray's Jewelers here.

Ray Levy, owner of this modern central Texas jewelry store, considers air conditioning an absolute "must" in a climate where summer temperatures of 105° 30 days in a row are nothing unusual.

The cost of a remote system was prohibitive and no basement space was available. Package units, he decided, were the answer, due to their compactness, and "on-the-spot" cooling capacity.

However, there was no space available for setting them up on the floor in the already-overcrowded jewelry store, and Levy knew that it would be impractical to remove a wall case, a counterpane, or make significant architectural changes, in order to make the air conditioning installation.

Levy decided upon a broad wall section, between rows of windows on the north side of the store. This blank wall space was supposed to

conceal a heavy post supporting the ceiling and upper floors of the building.

Levy had the wall tapped and it was found that only a single metal post was actually used for support. By cutting out a large enough niche to accommodate a 5-ton package cooling unit, the entire problem could be solved.

The result was a hollowing out of the blank wall between the windows and insertion of a 5-ton Chrysler Airtemp package air conditioning unit. The unit, only 20 inches thick, fitted neatly into the space, flush with the wall, and with the back of the unit against the supporting pillar. Painted the same color as the jewelry store walls, and neatly furred into the wall itself, the air conditioning unit is "almost invisible," Levy indicated. A removable panel at the bottom provides access for equipment repair at the front, instead of the rear.

A similar 5-ton Chrysler Airtemp unit was set up in the office. The combination of the two, with 10 tons of cooling capacity, keeps the store at a comfortable 80° through the worst of summer high temperatures.

To Cool Courtrooms

BARTOW, Fla.—Polk County's circuit and criminal courtrooms soon will be air conditioned, it is learned.

The county commission has awarded a contract for the installation to Swartz Service Co. of Lake Wales, on a base bid of \$23,100. The only other bid received was from Engle Electric Co. of Lakeland, which was a price of \$28,952.

In addition to the courtrooms, adjoining judges' chambers also will be air conditioned.

JUST ASK US!

Turn to "What's New" Page for useful information on new products.

Industrial Firm Will Install 390 Tons of 'Package' Conditioners

MINNEAPOLIS—What is said to be one of the largest sales of packaged air conditioning equipment ever made to an industrial user was announced by the United States Air Conditioning Corp.

The company reported that Piasecki Helicopter Corp. of Morton, Pa., has contracted for the purchase of ten UaAirco "Refrigerated Koole-air" units totaling 390 tons of cooling capacity.

The air conditioning installation, which is expected to be completed before the summer of 1952, will provide cooling for eight divisions of the Piasecki plant, which is now handling more than \$100,000,000 in defense orders. The areas to be conditioned include the tool design, tool and equipment control, purchasing, accounting, engineering, drafting, cafeteria, and reproduction departments.

The system, as designed by Charles S. Leopold, consulting engineer, in conjunction with J. E. Weber, plant facilities supervisor, and W. F. Schwartz, plant engineer of Piasecki, specifies nine 40-ton RK units and one 30-ton unit. This equipment contains in a single casing all of the elements of a central station air conditioning system, including a built-in evaporative condenser section for cooling water recirculation.

The contract was arranged by W. W. Malloy, UaAirco representative in Philadelphia.

NPA Ups Maximums on Self-Authorization For Controlled Materials for 3rd Quarter

WASHINGTON, D. C.—The benefits of self-authorization to obtain controlled materials have been extended to many small producers who formerly could not qualify for that privilege, the National Production Authority announced recently.

Starting with the third quarter of 1952, manufacturers of Class B products will be permitted to use the self-authorization procedure of Direction 1 to CMP Regulation 1 to obtain controlled materials up to certain limits. However, in so doing they must not exceed their average quarterly consumption of controlled materials during 1950.

Maximum self-authorization limits established under the amended direction for the third quarter are:

Carbon steel (including wrought iron).....	60 tons
Alloy steel (except stainless steel).....	10 tons
Stainless steel.....	500 lbs.
Copper and copper-base alloy brass mill products, copper wire mill products, copper and copper-base alloy foundry products and powder.....	3,000 lbs.
Aluminum.....	4,000 lbs.

Maximum limits on carbon and alloy steel and aluminum are twice as high as formerly.

The amended direction also permits any manufacturer of Class B products to use up to the following quantities of controlled materials, regardless of base period use:

Carbon steel (including wrought iron).....	25 tons
Alloy steel (except stainless steel).....	1 ton
Stainless steel.....	none
Copper and copper-base alloy brass, etc.....	500 lbs.
Aluminum.....	1,000 lbs.

All producers whose requirements go beyond the maximum self-authorization limits must apply for allotments of controlled materials.

Manufacturers of certain types of Class A products are permitted, for the first time, to use the self-authorization procedures. Included are those manufacturers who have been authorized by NPA to treat their Class A products as Class B products and those whose Class A products are sold to distributors or are for use as maintenance, repair, or operating supplies.

Viking Air Conditioning Picks 3 Representatives

CLEVELAND—Viking Air Conditioning Corp. has announced the appointment of three new manufacturers' representatives—Robert J. Flanagan, Edward T. Taber, and Albert C. Schultz—to handle its line of window and attic fans. Flanagan will cover northern Illinois and Chicago; Taber, Iowa and Nebraska; and Schultz, New York state outside New York City.

Quality-Engineered by TYPHOON

DEPENDABLE EQUIPMENT FOR YOUR
AIR CONDITIONING NEEDS

SELF-CONTAINED UNITS
SC MODELS 5 AND 81

CONSOLE UNITS
SC MODELS 1 1/2-2-3

SELF-CONTAINED
(REMOTE) UNITS
SC MODELS
15 AND 30

EVAPORATIVE
CONDENSERS
SC MODELS 3-5-8

EVAPORATIVE CONDENSERS
SC MODELS 10-15-20

AIR HANDLING UNITS

PACKAGED
WATER CHILLERS

HEAT PUMPS

ALSO—WINDOW UNITS, BOILERS, COILS AND MULTI-PACKAGED SYSTEM UP TO 60 TONS.

Whether the job calls for a single packaged air conditioning unit or a central plant... a packaged water chiller or a heat pump—you can count on Typhoon equipment to supply your needs. And Typhoon's quality engineering—backed by over 40 years of experience—is your guarantee of trouble-free performance.

Satisfied Typhoon users include famous companies like RCA, Grand Union Stores and Whelan Drug Stores. They've found Typhoon equipment tops in economical operation... tops in cooling efficiency. You will, too.

Write for Detailed Information

TYPHOON AIR CONDITIONING CO., INC.

794 Union Street, Brooklyn 15, N. Y.

Specialists in Air Conditioning Since 1909



EVAPORATIVE CONDENSER

by
KRAMER

Unmatched in the industry
for its trouble-free operation.
2 to 10 ton models.



Write for
Catalog K-223

KRAMER TRENTON CO. • Trenton 5, N. J.

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

people, you are in a position to improve yourself."—*Journeysman Barber.*

What Price Incentives?

The widest scope for personal incentive is the fact of life that has made America great. Crawford H. Greenewalt, president of Du Pont, avers.

"There is no point in discussing whether there shall or shall not be incentives, for they are a fact of life," he insists. "I am convinced that those incentives are best which tend most strongly to advance the good of society as a whole. And nowhere have we better demonstration of that thesis than in these United States."

"That nation is strongest that provides whatever incentives are needed to make its people do their best," he declared. "That nation is weakest that fails to utilize the tremendous power of self-interest."

The greatness of the United States is due simply to this fact: "Under our principle of individual liberty, human incentive has been given its widest possible scope," Mr. Greenewalt declares. "To each of us has been given the opportunity to do his best; to each the right to retain the fruits of his labor; to each the re-

sponsibility of preserving those rights for his neighbor."

He points out that all human accomplishments are important, but those of a limited few have been great; that all contribute to the common good but those at the top of their fields contribute more, since great individual success is never attained without bringing part of that success to others.

He likens it to the neutrons in an atomic pile because "individual accomplishment marks the beginning of a chain reaction extending its influence far and wide"; and the reward to the individual is "negligible" in the total of the benefits his abilities bring about.

Mr. Greenewalt calls attention to the achievements of several individuals to illustrate his meaning. He notes that while Henry Ford acquired a great personal fortune, "it would be counted small when measured against the benefits his genius for mass production created—in terms of employment, profit, and enjoyment for millions of people."

"The point is," he clarifies, "that rewards for individual achievement, no matter what form they take or what their amount, are bargain-basement levels when measured against public benefits."

Incentives are simple and few in number: the inner satisfaction of doing our best; prestige; power and influence; but for most people the strongest incentive is financial gain because of what can be done with it, he said. What is done with the reward, or why it is wanted, is of no real importance.

The important thing is that the individual do his best "for only then

can the nation reap the greatest benefits from his abilities," Mr. Greenewalt furthered. "Personal prestige is more likely to go with success in the sciences, arts, or professions, so business must balance this with financial reward if it will fill its ranks with able people."

"Much has also been said about the vulgarity of the money motive, but I doubt one could find a cleaner or more honest basis for rewarding high performance. A desire for power is surely less worthy, and I cannot believe that efforts simply to win the admiration of the crowd are ethically more desirable."

"And so it is distressing to see financial incentives weakened by ever more steeply progressive personal income taxes. If financial incentive is the strongest of the incentives we have to offer, it must of necessity follow that the nation's vigor will be weakened by its removal. And it is for the nation, not the individual, that we should be primarily concerned."

It is not a question of abandoning a large share of our present governmental activities because the revenue obtained at the cost of our incentive system is "pitifully small," he continues. For 1948, the most recent year for which figures are available, all Federal taxes collected on individual income above 25% would run the government for less than a week at present proposed rate of spending.

He doubts that this situation will have a serious effect on actions of present business leaders. However, he poses this query: "Who will take their places?"

The Du Pont Co. has 16 levels of responsibility from wage-roll em-

ploys to president. To insure as many candidates as possible for each level, the company has maintained adequate differences in pay for each step upward.

"But I doubt that the pleasure of paying higher taxes is much of an incentive, and unfortunately, the increases after taxes have become less and less as the level of responsibility increases," Mr. Greenewalt observes. "We are seriously concerned that our promising young people may not consider the competitive race worth their while."

If the financial incentive is absent or reduced too low, candidates for management positions will decrease, since many men will go into vocations where other rewards seem more desirable to them, he continued. The other motives that remain for industry are less desirable.

"Certainly the desire for power, or the desire for prestige or admiration, are not characteristics that would be expected to lead to the kind of competence we need in business management," he explores. Substitute motives have been tried elsewhere, but, while some are harmless and others merely distasteful, none of them is in harmony with democratic society.

"The solution will depend on informing our people in a manner that is sound, objective and free of bias or political controversy."

"I think much could be gained, therefore, if people knew the whole truth about our present tax system. When they do, they will realize, first, that weakening of incentives hurts everyone, not just the more successful minority. And they will discover, most importantly, that the high cost of government is not being paid by the few but by the many—that it is their pockets that are being tapped."

"I doubt that there is much to be gained by berating the administration or our representatives in Washington for Federal spending and governmental extravagance," Mr. Greenewalt said. "Those in public office after all reflect what they consider the wishes of their constituents to be. For that we cannot blame them."

"I do think, however, that we can fairly criticize government's unwillingness to tell the people the realities of the burdens they are asked to assume. It is as if they had no confidence in the native intelligence of the voting public; as if they adopted every means at their disposal to make them believe that government

spending and the resultant high level of taxation were in some way removed from their own shoulders."

He is convinced that it is the duty of all thinking men to inform the public about the effect of governmental give-away policies.

"We find sham and deceit triumphant in many parts of the world; I am afraid that they are not wholly strangers here at home. Everyone knows that personal income taxes come out of his own earnings. I suspect, however, that few know that aggregate personal income taxes are now scarcely 50% of total Federal taxes."

Pointing to the corporate income tax, Mr. Greenewalt believes there is much misunderstanding as to who really pays it.

"It seems clear to me that corporate taxes in the long run are simply added to the cost of the goods and services the company has for sale. Just as prices must recognize an increase in labor and materials cost, just so must they take into account taxes levied by Government. For any business must earn a profit if it is to survive. That profit, furthermore, must be adequate to attract the capital necessary for growth and development. And so it is the customer at retail who must pay the bill."

"Taxation in sneakers is just as real and just as costly as taxation in hobnail boots," Mr. Greenewalt concludes. The manipulation of concealed taxes "is a sorry device to hide the fact that personal income taxes no longer can pay the bill."

Corley Joins Victor as Central Area Sales Mgr.

HAGERSTOWN, Md.—J. K. Noel, Jr., vice president in charge of sales for Victor Products Corp., announced the appointment of Harry E. Corley as district sales manager of its central territory. His headquarters will be in St. Louis.

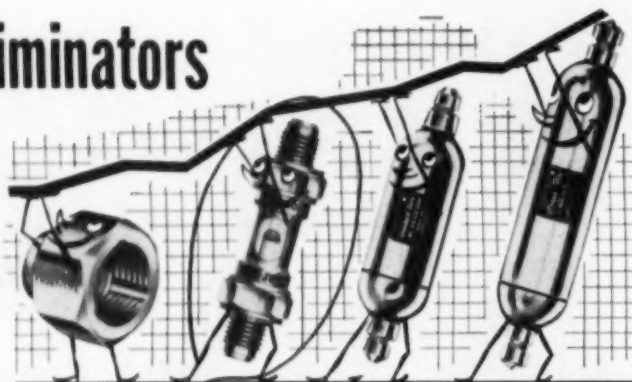
Corley comes to Victor with years of previous experience in the refrigeration industry. He has been sales counselor for Westinghouse Electric Supply Corp., serving the St. Louis area.



H. E. Corley

REMCO loss eliminators

pull up profits for you!



FROST-TITE FLARE NUTS
with forged frost-relief slots. No more losses from loosened "creeping" nuts.

STANDARD DUTY DRIERS
The lowest cost, most efficient molded drier on the market.

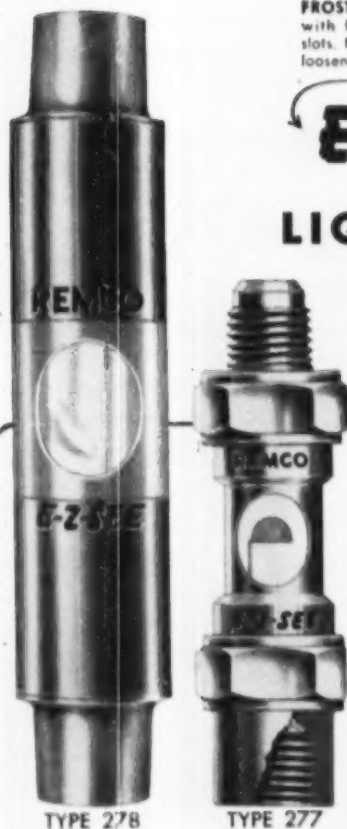
Cross-Flow DRIER FILTERS
Heavy-duty—with new Fiberglass Depth Filter and new Remcal Drying Element.

E-Z-SEE leakproof LIQUID FLO-INDICATORS

with NEW Flow-Responsive FLAP to instantly indicate all variations or interruptions of flow.

The most versatile, dependable liquid indicator on the market—now more efficient with its exclusive new FLO-Indicator, which indicates flow by means of a sensitive FLAP in the tubular glass directly in the path of the liquid. Now the serviceman can accurately analyze the functions of the expansion valve by the action or position of the flow-responsive flap.

All E-Z-See Liquid Indicators are E-Z to see thru; positively leakproof; perfectly safe for pressures to 500 psi. In sizes 1/4" to 1/2"—plus new larger sizes in 3/4" to 1 1/4".



TYPE 278

TYPE 277

CARRIED IN STOCK BY LEADING WHOLESALEERS EVERYWHERE
Send for Literature and Prices.

REMCO

INCORPORATED

ZELLENOPLE, PENNSYLVANIA

HOW TO SELL YOUR SALESMEN ON SELLING . . .

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Spring Promotion of Packaged Units Held Vital To Pave Way for Hot-Weather Sales

'And Be Set To Make Installation When Sale Is Closed'

LINCOLN, Neb.—Start promoting packaged air conditioners in the spring so you'll be ready for hot weather as soon as it arrives, and be ready to make the installation as soon as the sale is made.

That's the advice of Jim Cole, manager of Frigid Service Appliance Center here, who lays claim to having sold more units last year than any other retailer in Lincoln.

Although it takes hot, humid weather to promote packaged air conditioners effectively, particularly home units, early planning is necessary to pave the way for sales, according to Cole. Also, he added, some prospects may be induced to buy early in anticipation of hot weather.

DRIVE STARTS EARLY

Cole starts a direct mail campaign in April to get leads. He uses factory-prepared literature in a series of three mailings aimed primarily at the professional people such as doctors, dentists, and lawyers. These are the people who have the money to buy and who are easiest to sell before hot weather breaks, the Lincoln dealer has found.

The Appliance Center mailing pieces emphasize comfort, health, and increased patronage for the professional men using air conditioning.

The part air conditioning plays in attracting customers, protecting merchandise from soiling and spoilage, decreasing cleaning and maintenance costs, and enhancing the productivity of the operating staff, is played up to businessmen such as druggists, shoe store owners, etc.

Newspaper advertisements and radio spots, are used, starting about a week after the mailing pieces are sent out. Brand name, quality, and the dealer's name are stressed in this advertising.

Also emphasized are the points that the packaged air conditioners cool, dehumidify, filter, and circulate the air; exhaust stale air (this is cited as a special feature of the air-cooled models); enable year-round ventilation (air-cooled models provide fresh, filtered outside air when desired, independent of cooling); and remove air-borne pollens and dust that cause discomfort to hay fever and allergy sufferers.

Two and three-column mats furnished by the manufacturer are employed in newspaper advertising. An effective series last year used illustrations and legends to point up such themes as:

AD SLOGANS USED

"Sleep every night in cool comfort," "reduce energy-sapping fatigue in the office and home during hot weather," "for babies—freedom from heat rash and discomfort," "for the store and office—increases efficiency and cuts down employee absences," "for the doctor's office—staff as well as patients appreciate cool comfort," and "earns its way many times over in store or shop."

Cole explained that the ads can be cancelled if the weather should turn cool. The direct mail and early ads are planned to furnish leads, he said, but the ads beamed to immediate sales promotion have to appear during hot weather for the dealer to get his money's worth.

As the season advances and the temperature becomes more conducive to sales, the Lincoln store sets up a floor display of various models of air conditioners along with an animated display in the window, with one or more units in operation. This phase of the selling campaign usually is launched in May but might be earlier or later, depending upon the weather. In connection with both the display and advertising, a free home trial is offered.

"A 'must' in retailing air conditioners is to be set for hot weather just as soon as it arrives, and be ready to make the installation when the sale is made," Cole asserted. "Early promotion pays off both in

securing a few sales in anticipation of hot weather and giving the dealer leads to be followed up in hot weather, but the real profits are made when the weather is on the air conditioning dealer's side.

"We closed many of our sales with people who had shopped most or all of the retail stores, and the thing that closed the deal was our ability to install immediately," he continued. "You can't let the jobber carry your

stock for you and expect to compete successfully with the dealer who has sufficient inventory to allow the customer to select the model he wants."

Cole recalled that he made several sales last year to people for whom another dealer had promised to order and have the air conditioner ready to install in a few days. Having made up their minds that they wanted air conditioning, these customers wanted it "right now," and Frigid Service Appliance Center got the business because it carried a representative stock.

POINTS ON STOCKING

The Lincoln retailer cautioned, however, that over-stocking also can cut profits. He has found it best to carry sufficient stock that he can display all models on the floor during the selling season, and then back up the more popular models. Incidentally, the model most wanted in Lincoln has been the $\frac{3}{4}$ -hp., heavy-duty window sill model.

Cole listed two points as of utmost importance in making an air conditioner sale:

1. Make a survey of the space to

be air conditioned, and never sell a customer a model too small to handle the maximum room space for which it is designed.

The type of building, sun exposure, any heat-producing appliances in the room, height of ceiling, and similar factors must be taken into consideration in selecting the right size. Cole noted that an almost "sure-fire" way to lose a customer and get unfavorable word-of-mouth publicity is to sell a job that isn't big enough to handle the required job.

2. Check the home or office wiring to see if the circuit is heavy enough to handle the job; also see if it is properly fused.

Once the deal has been made, the dealer must be prepared to have it installed that same day, according to Cole. He pays his workmen overtime to make such installations the evening of the day the units are sold, and the work is set up on a percentage basis with the employees each taking their turns.

A service record is kept on each unit sold, with entries being made for every service job. Filters are changed and the unit cleaned as

routine service. A fall removal service also is maintained and noted on the record.

CALLS SPREAD OUT

Each sale is carded the same as any other major appliance and filed with installation date and service records. Customers are contacted by phone on routine service business and for winter storage. These phone calls are spread out over a period of several weeks in the spring to keep re-installation work from piling up when hot weather arrives. The blower motors are checked and new filters installed at a set fee when the units are taken out of winter storage.

Cole makes it a point to display packaged air conditioners prominently in the window and on the floor from the time hot weather arrives until about Aug. 1. Then a smaller display is maintained on the floor through the hay fever season which usually ends late in September.

People with allergies constitute "preferred" prospects for sales, and the Appliance Center's personnel has been schooled to keep an "ear peeled" for all such prospects.

Enjoy year-round Controlled Comfort

Better Living—Greater Comfort

FOR

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COOLS CIRCULATES
VENTILATES DEHUMIDIFIES
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SHUTS OUT NOISES

THOUSANDS of sales-minded, profit-minded dealers said "That's for me!" when they first had a look at the New Fedders Demonstration Center. They quickly recognized that this new Selling Center was the perfect tool to insure a full share of this spectacular room air conditioner business!

BRINGS MAXIMUM SALES FROM 30" x 57" SPACE

Employing the most modern display and visual selling techniques, this selling center provides an organized place to sell, and an organized story to tell. It cues the salesman who is making the product pitch or acts as an automatic salesman when the prospect is unattended.

GET IN ON THE ACT!

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FEDDERS-QUIGAN CORPORATION
Dept. AC-5, Buffalo 7, New York

SIRS: Please send me full information on how I can put a Fedders Demonstration Center to work on my sales floor.

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Address.....
Company..... City.....
County..... State.....

Commercial Refrigeration

Transporting Frozen Citrus Concentrates

Improved Loading Arrangement Results from Government Study Which Indicated That Outer Layers Suffered Most In Trains or Trucks

CHICAGO—Results of tests made by the U. S. Department of Agriculture on the transportation of frozen citrus concentrates by refrigerated railroad car and refrigerated truck were reported to the National Association of Frozen Food Packers at the National Frozen Foods Convention here recently by Harold D. Johnson of the marketing and facilities research branch of the USDA.

Johnson noted particularly that the truck tests led to an improved arrangement of air circulation that resulted in reducing substantially the variation in temperatures in various parts of the load.

He said the tests were made during 1950 by the Bureau of Plant Industry, Soils, and Agricultural Engineering and the Production and Marketing Administration at the request of Florida processors of frozen citrus concentrates.

Four tests were conducted by rail in 11 cars of various types and 23 tests were conducted by motor carrier. These included mechanically re-

frigerated vehicles as well as some refrigerated by other means.

"In all of the tests," Johnson said, "with few exceptions, the only significant change or rise in product temperatures occurred in the containers in the outside layers of the load—top, bottom, and sides.

"The rest of the packages, protected by the insulating effect of the outer layer of cases, did not vary more than two or three degrees.

Outer Layer Makes Up One Third of Shipment

"The warming of the outer layer of the cases is the chief concern in the movement of all frozen foods, whatever mode of transportation is used. The efficiency of the refrigeration service may be measured by the temperature changes in the outer layer of packages, which comprise approximately one third of the shipment.

"Any effect on quality that may be caused by excessive temperatures

in those packages will have a considerable bearing on the acceptance of the entire load."

In the railroad car tests, two types of mechanical refrigeration were used, one gasoline powered and the other diesel powered.

In the gasoline-powered system, he explained, "the units were installed in the place of one bunker in a 40-ft. railroad car with 6-in. of insulation.

"The two refrigeration units were mounted in one end of the car in a compartment the width of two normal ice bunkers. Thus the loading space was the same as for a standard 40-ft. end-bunker car. This car was equipped with wall flues and 7-in. floor racks, which in the test were covered with solid flooring, providing an air space around the load.

"Refrigerated air was blown from the unit or units into the space under the floor racks and moved to the far end of the car and to the side flues. It then passed upward into the open space above the load and

MECHANICAL SYSTEM OF REFRIGERATION

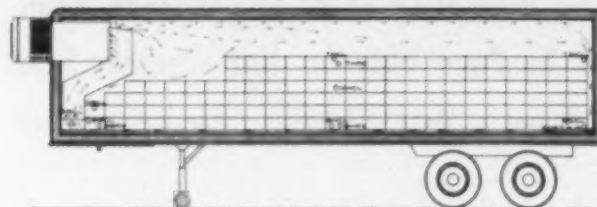
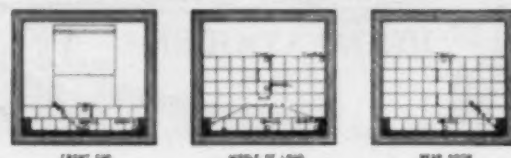


DIAGRAM of a 30-ft. trailer equipped with a return air duct and using the modified loading system suggested by the Department of Agriculture. Note location of electrical resistance thermometers.

returned to the unit through an intake grill at the top of the bulkhead.

"In this way the load was completely surrounded by moving refrigerated air and the heat passing through the car structure was picked up and dissipated by the unit before it could enter the load.

"Both units were controlled by thermostats set at a differential of approximately 2° F. With a temperature rise above the minimum setting, the lead unit started operating.

"If the temperature in the car rose to such a point that one unit could not adequately refrigerate the load, the second unit automatically started operating until the temperature was reduced to the thermostat setting, then both units automatically went off.

"The car equipped with this system of refrigeration was used in two tests. In both tests it was pre-cooled 18 to 20 hours before loading and had an average air temperature of 0° F. or below.

Some Warming Noted During Loading

"There was some warming of the commodity during loading, but it cooled quickly after the units were started. In the first test the thermostat was set at -4° F. and the unloading temperature averaged -4° F.

"In the second test, which was in June with warmer weather, commodity temperatures were lowered considerably during the transit period.

"Temperature readings taken after loading ranged from -6 to 4° F., averaging 0° F. At destination they had been reduced to a range of -11 to 4° F., averaging -5° F., or a drop of 5° in transit. The thermostat on this trip was set at -7° F.

"The only adjustment made en route was to open the expansion valves of both units, which may be considered a normal operating adjustment."

Turning to the other mechanically refrigerated railroad car, Johnson said that it, too, included 6-in. of insulation.

"A compartment housing the diesel-powered refrigerating equipment," he continued, "was also equivalent in size to the width of two regular ice bunkers. Loading space in this car was the same as in a standard 40-ft. refrigerator car.

"Floor racks were 7½ in. high, and the vertical and horizontal wall strips had a space of 1½ in. for circulation of the air around the load. Air delivery in this car was just opposite of that in the other mechanical car, as the refrigerated air was delivered through an opening in the top of the bulkhead, moving along the ceiling and down the side walls and end wall.

Circulation Assured Complete Envelopment

"The air was then drawn under the floor racks and returned to the

unit through an intake at the bottom of the engine compartment bulkhead. The circulation assured complete envelopment of the load by refrigerated air.

"Refrigerating equipment consisted of a diesel-powered electric generator, motor-driven compressor, and motor-driven, air-circulating fans. The diesel generator operated continuously while the car was in service, as did the air-circulating fan. The compressor cycled on and off in accordance with the demand of its controlling thermostat.

"The thermostat was set at -3° F. The commodity temperatures at the time of loading ranged from -3 to 0° F., averaging -1.5° F. and held a very uniform commodity temperature in transit. On arrival the commodity temperatures ranged from -3.5 to 0.5° F., averaging -1° F."

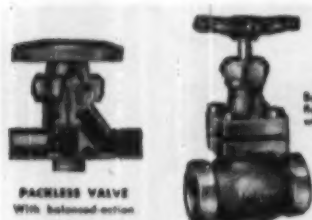
In the truck tests, Johnson said, all but two were made with mechanical refrigeration equipment. Those two were refrigerated with dry ice.

All of the mechanically refrigerated trailers, he continued, "were the standard 30-ft. units with aluminum or stainless steel outside sheathing. One trailer had steel outside sheathing enameled white. All the units were constructed with heavy duty tandem axles and had 6 in. of insulation in the floor, walls, as well as ceiling.

Irregular Spacing of Wall Strips Ineffective

"Floor racks . . . were not generally used in the truck-trailers. Instead strips of wood or metal 1½ in. wide, ¾ in. high, spaced from ¾ to

(Concluded on next page)

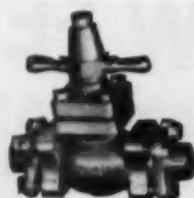


PACKLESS VALVE
With balanced action

AMMONIA VALVE
Ball and cone type of
flange connection. Also
with tapered bottom, sizes
1" and under



WING CAP VALVE
Non-ferrous



WING CAP VALVE
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flanges and adapters



STRAINER
Angle type with patented
distortion-proof flange



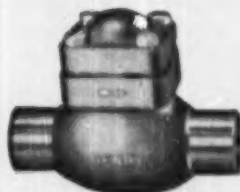
T-STRAINER
Bronze plated, welded
steel construction with
flanged bronze connection.
Size 1/4" O.D. S. through
4 1/2" O.D. S.



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LIQUID LEVEL GAUGES
Valves are backseating—
diaphragms may be inspected or
replaced without loss of liquid.
Conforms with all safety code
requirements.



EXTRA CAPACITY DRIER
2 cubic inches more than established
practice. Forged brass and caps.



CHECK VALVE
Pat. Type For Pumps, Sizes
1/4" through 4 1/2" O.D. S.



DRIER
Cartridge type with
dispersion tube



SHAPESIDE RELIEF
VALVE
Large capacity—
fast positive relief
and resealing action.
Very small differential
between opening and
closing pressures.



STRAIGHT-THROUGH
RELIEF VALVE
Large capacity—All
Bronze Construction.
Sizes 1/4" S.P.T. through
1" J.P.T.

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No. 100 Packless and packed valves, strainers, driers, ammonia valves, check valves, relief valves, three-way valves, scale traps, liquid gauge sets, flange unions, nut unions and accessories for air conditioning and refrigeration and industrial uses.

No. 70 Drop forged and cold rolled steel fittings.

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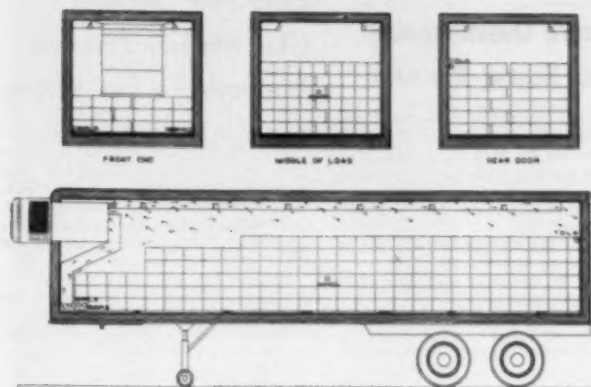
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SPRING and SUMMER
HARRY ALTER'S DEPENDABOOK

REFRIGERATION Parts & Supplies
plus TELEVISION • RADIO • HEATING
ELECTRIC MOTOR PARTS
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Write for your copy NOW!

The HARRY ALTER CO. Inc.

MECHANICAL SYSTEM OF REFRIGERATION



LOADING arrangement and location of recording thermometers using the long air delivery duct and the original Department of Agriculture modified air duct.

Improved Loading Arrangement--

(Concluded from preceding page)
1 1/4 in. apart and running the length of the trailer were used. The irregular spacing of the 1/4-in. wall strips did not prove too effective.

"In many instances the load was stacked from the front end right up to the rear doors and from wall to wall, thus blocking air circulation around the load.

"In these early tests, with regular loading and operation of the mechanical refrigerating units, load temperature averages at destination ranged from -2.5 to 10° F., and average rises up to 9° F. were recorded.

"Maximum temperatures of 16 and 18° F., found at certain positions in

the bottom layers of the loads, were believed to be caused by inadequate air circulation around the load.

"The bottom air ranged between 15 and 20° F. and the air at the top of the load ranged for the most part between 5 and 10° F., thus showing the lack of air circulation under the load due to inadequate floor racks.

"In order to improve the circulation of air surrounding the load in the truck-trailer, a return air duct was proposed by the Department of Agriculture representative to draw the air from the floor of the trailer instead of over the load.

"This modification was first used in our truck test No. 16. A long-delivery air duct was installed in the ceiling of the trailer, but it was subsequently abandoned as no benefit was observed from its use.

"The return air duct did not cover the entire face of the air intake of the refrigerating unit on the first test of the modified system. A space of 3 in. remained open, this opening reducing the suction of air into the duct at the floor. The opening also allowed a certain amount of cold air to short circuit over the top of the load.

Results of Test

"The results of this test did show an improvement in the commodity temperatures in the positions which had high temperatures in previous tests. Nevertheless, the results were not completely satisfactory. Here is the way we undertook to correct the deficiencies mentioned.

"The depth of the return air duct was increased to 14 in., thus covering the entire face of the return air intake of the mechanical unit. Placing baffles in the forward corners of the trailer eliminated the short circuiting of cold air at that point.

"A modified loading plan was also put into effect in which channels were provided at each side wall along the floor, the full length of the trailer, to increase air movement down the side walls.

"With these modifications, by which the units operated properly, the air and commodity temperatures were lowered in transit. The average temperatures dropped from 5° F. to between -5 and 0° F.

"In another test the commodity temperatures were reduced from 2.5° F. to 0.5° F. and in the third test, commodity temperatures were reduced from 2.5 to -3° F.

Return Air Duct, Modified Loading Plan Get Results

"Temperatures of 16 and 18° F. found in certain locations in the early tests in the trailers using mechanical refrigerating units were reduced substantially by the use of the return air duct and the modified method of loading. In fact, some of the largest processors are requesting motor carriers to make these modifications.

"Refrigerating capacity was adequate, but mechanical difficulties arose in a number of truck tests. Some drivers were not trained to maintain satisfactory operating conditions.

"During loading of the rail cars, protection of the commodity from outside temperatures was fairly adequate, but none was provided during loading of trucks. Furthermore, both rear doors of the truck-trailers remained open throughout the time of loading, thus exposing the inside of the trailers to heat from the outside air and materially reducing the effects of pre-cooling. Every precaution should be taken in loading to con-

STORED AND COMMODITY TEMPERATURES IN TRUCK TRAILER TEST NO. 16

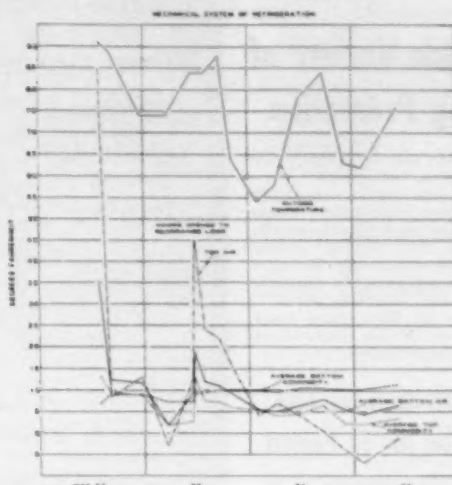


CHART indicates what happens when careful loading is not observed and it is necessary to open doors in transit. Chart is from Department of Agriculture study.

serve refrigeration and prevent an undue temperature rise of the product."

Johnson then told the group what happened in one test when the rear doors remained open and no protection was provided to keep the trailer and the product cold.

"When the doors were closed after loading, the air temperature over the top of the load was 55° F. and at the bottom of the load it was 35° F. These trailers, when loaded with proper protection over the rear door, should not have temperatures over 35° F.

"Another point of interest which

happened on this test trip was that the trailer doors had to be opened to rearrange the load at one of the road scales. This can be avoided through care by the loading crews and the truck drivers. The air in the top of the load rose to 45° F. in a few minutes and it took approximately 12 hours to bring it down to 5° F.

"Loading should be arranged so that a space of at least 2 in. remains between the load and the rear doors for air circulation. And let me caution you, spare tires should not be placed inside the trailer, because they reduce air circulation."



FRED ADAMS

JOHN MACK

Mack, Adams Represent Jordon In Midwest Areas

PHILADELPHIA — Appointment of two new factory sales representatives in midwestern states has been announced by the Jordon Refrigerator Co. here.

John E. Mack has been named representative in Ohio, Indiana, and Michigan and will have his headquarters in Columbus, Ohio. Mack has been associated with Jordon for many years in the factory sales division.

Fred D. Adams of Adams Sales Co., Waterloo, Iowa, will represent Jordon in North and South Dakota and Nebraska on the firm's commercial and domestic lines and in Iowa and Minnesota on the domestic line only. The domestic line includes upright and chest type freezers.

Miss. Firm Incorporates

CLARKSDALE, Miss.—Mississippi Refrigeration Co., Inc., has been granted charter of incorporation, it was announced recently. Capital stock was listed at \$5,000.



Dr. Howell's Clinic at Canton, Miss.

SUPERIOR ESTABLISHMENTS CALL FOR SUPERIOR AIR CONDITIONERS

You get this extra quality when you buy Frick Units. They're better designed, more carefully built, and are installed by experienced refrigerating engineers.



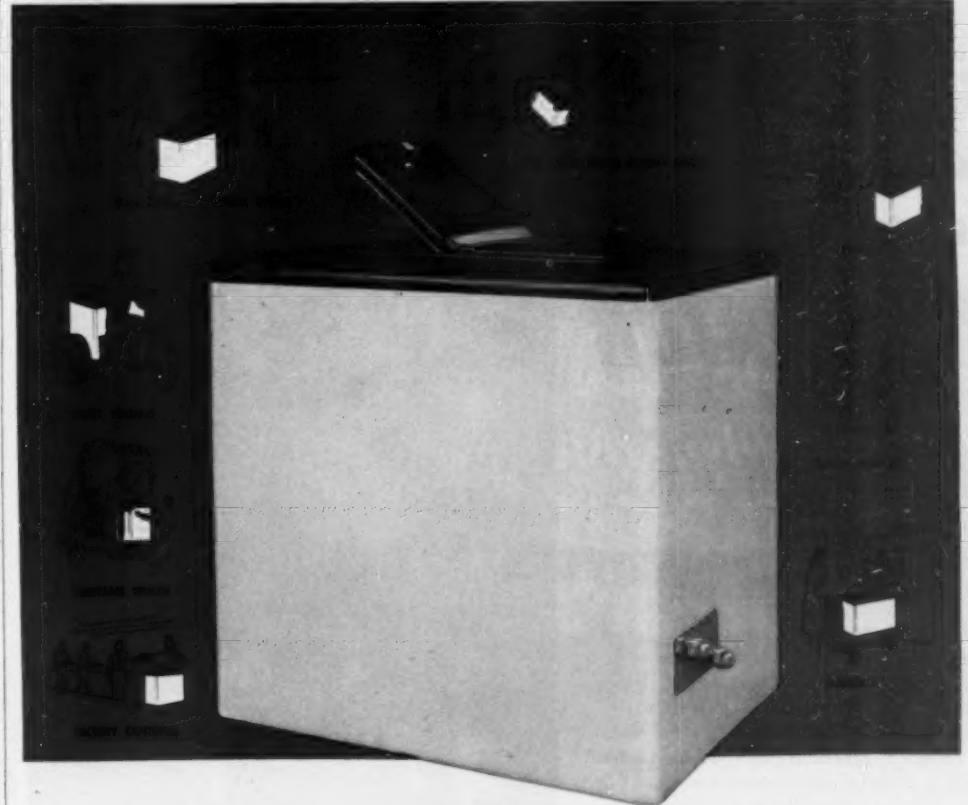
Frick Unit Conditioners include Winter Heating Coils when Desired.

Their useful life is between 20 and 30 years.

Two sizes, 5 and 7 1/2 horsepower. Get the full facts on Frick Unit Air Conditioners—the choice of those who want the ultimate in quality—before you buy. Write

Frick Co.
WATKINS, ILL.

Unit Cooling Combined Drafting Room and Offices



NOW! mobile refrigerated vending without dry ice

in the HOLD-OVER Vending Cabinet

Here is the Mobile Vending Cabinet you've been looking for . . . one that keeps its contents as uniformly cold as a compressor-cooled store installation. Although mobile, it requires no dry ice and you have no electrical or other connections to make on location. Predetermined low temperatures are maintained for 10 to 12 hours by the "Hold-Over" principle, a method of refrigeration fully proved through wide use in the transportation of ice cream and perishable foods.

You can mount a "Hold-Over" Vending Cabinet on a motor scooter or as a side car to a bicycle for street vending. You can deliver it by pick-up truck to corner vending stations for specific picnic groups, ball games or other sporting events. You can provide facilities for the transportation and sale of ice cream and frozen foods on non-insulated trucks and on trucks equipped only for medium temperature operation.

Send today for descriptive literature and prices.

HOLD-HOLD

protects every step of the way



Novel Coupon Book

'Preferred' Customers Get Wide Variety of Free Services In Sales Boosting Promotion

OKLAHOMA CITY—Al Robertson gives credit for dozens of additional appliance sales to a novel coupon book which entitles customers to several dollars worth of free merchandise and services.

These books, it is explained on the cover, "are only given to our preferred customers to show our appreciation for your patronage." The cover points out that there are "no strings attached" nothing to buy to use the coupons.

One coupon is good for \$1 when used on the repair of a radio or the purchase of a radio tube. Another is good for the free repair of a lamp. Still another entitles the holder to the use of an electric floor polisher for 24 hours. A fourth is good for one free radio tube.

Others entitle the holder to the free use of hedge trimmers, to have one string of Christmas tree lights repaired free, to the free use of a vacuum cleaner for 24 hours. More coupons are good for free iron and iron cord repair; choice of a box of "Rinso," "All," or "Calgon"; and free use of a "Laundromat" automatic washer for one load of clothes.

The remaining coupons are good for free toaster repair, five free house fuses, one free light bulb, and use of a clothes drier "some rainy day when you are behind with your work."

The dealer has found that in general, customers appreciate the coupon

book more than they would the usual gift of groceries, turkey, etc.

Robertson also builds volume by urging customers to send their friends to the store and promising the former gifts if their "bird-dogging" results in sales. When such a sale is closed, the dealer sends the original customer a small appliance or similar prize.

Ideas such as these have made Robertson one of the city's most popular appliance dealers.

Admiral 1st-Quarter Net Lower Than In '51 Period

CHICAGO—Net earnings of \$1,515,506, equal to 79 cents per share, by Admiral Corp., were announced recently by Ross D. Siragusa, president, on first-quarter sales of \$43,970,356.

Siragusa said this year's first-quarter figures represent a comparatively normal period, although they were lower than those for the comparable period in 1951 which still reflected the widespread scare buying that resulted from the Korean war. First-quarter earnings in 1951 were \$2,403,344, or \$1.25 per share, on record high sales of \$70,321,548.

Admiral will produce far more military equipment in the second quarter than was shipped in the entire 21-month period since the outbreak of fighting in Korea, he said.



Ice Cream Freezer Tie-In Promotes Home Freezers

SYRACUSE, N. Y.—Egan & Bisbing here promoted the sale of home freezers by using a new gimmick—an electrically-driven ice cream freezer as a tie-in.

The store offered both the home freezer and the ice cream freezer for \$399.95 compared with a regular value of \$457.90. Egan & Bisbing pointed out in a newspaper ad launching the promotion that the ice cream freezer makes homemade ice cream for 25 cents a quart, quickly and automatically.

Follow-Up

Postcard Questionnaire Builds Repeat Business

BATON ROUGE, La.—Joy's Department Store, appliance retailer here, builds goodwill and repeat business by sending customers a questionnaire-type postcard after every sale.

The postcard asks the customer these questions:

- "1. Did the salesman show that he was anxious to serve you?"
- "2. Were the sales and office personnel courteous and helpful?"
- "3. Was your visit to the store a pleasant one?"
- "4. Was the delivery service satisfactory?"
- "5. Were the deliverymen careful?"
- "6. Did they place your merchandise as you instructed them?"

Finally, the customer is asked if he has any suggestion and if so, to write it in the space below.

A large percentage of the cards are returned with most of the questions answered "Yes."

By spending a few cents on each card, Joy's has developed a host of friends and a long list of "repeat" customers.

Crosley Appoints Nemes To Air Conditioning Sales Position

CINCINNATI—The appointment of Ted Nemes as assistant manager of the air conditioning sales section was announced by F. F. Duggan, general sales manager in charge of appliances of the Crosley Div., Avco Mfg. Corp.

Nemes in his new responsibilities will report directly to J. L. Armstrong, manager of the air conditioning sales section, and will make his headquarters in Cincinnati.

Before joining Crosley, Nemes was assistant sales manager of the Fedders-Quigan Corp.

RCA Appoints Greenway In East Central Region

CAMDEN, N. J.—Rowland B. Greenway has been named field sales representative for RCA room air conditioners in the east central region, it was announced by W. F. Carolan, general sales manager of the air conditioner department.

Greenway will establish headquarters in Cleveland. Among the other major market centers in the region are Cincinnati, Detroit, Saginaw, Mich., Pittsburgh, Rochester, and Huntington, W. Va.

This appointment completes for the air conditioner department a full complement of field representatives.

Lima Fish Terminal Uses Modern Freezing Methods To Cut Waste

LIMA, Peru—Within the next few weeks, "Terminal Pesquera de Lima" will be formally inaugurated, this model market serving not only as a distribution center for fresh fish, but also utilizing the latest refrigeration equipment for quick freezing excess fish.

Thus, Lima will solve the age-old problem of regulating the supply to meet the day-to-day as well as future demand. Result: more stabilized prices for consumers and a healthy expansion of the entire fishing industry in this area.

This important project, now nearing completion, was recommended by the Direccion de Pesqueria y Caza to the Departamento de Ingenieria del Servicio Cooperativo Interamericano de Produccion de Alimentos (SCIPA), and is being financed by the Ministerio de Agricultura.

Cilloniz-Olezabal-Urquiaga, Inc., well-known builders, carefully designed the new two-story terminal to insure quick service for both supplier and buyer. Separate exits and entrances fan out from loading and unloading platforms that will accommodate 24 trucks at one time. Through loud speakers, those doing business in the terminal will be kept constantly informed on prices of the various types of fish on sale.

Since it was obvious that there would always be a surplus of fish, particular emphasis was given to providing the best possible freezing facilities. Refrigeration rooms will have a daily capacity of 122 tons.

These storage rooms and the freezing chambers were designed by A. & F. Wiese, Inc., of this city, distributor of Worthington Corp., and will be equipped with Worthington refrigeration equipment.

One freezing chamber, which will accommodate 10 tons of fish daily, will operate at -30° F. (-34.44° C.). The frozen fish will be stored in two rooms kept at 0° F. (-17.78° C.) and having a capacity of 20 tons. Besides, there will be eight rooms with a total capacity of 92 tons where the frozen fish will be stored at 32° F. (0° C.).

Next to these rooms there will be a chamber containing the following Worthington equipment: three 30-hp. ammonia compressors, two 75-hp. compressors, and one "booster" compressor. Evaporation type condensers in the installation will reduce water consumption 90%.

Worthington ice-making equipment will have a daily capacity of 50 tons of ice, which will be used to protect the fish en route to markets and consumers.

La Terminal Pesquera de Lima will also be equipped with two huge scales capable of weighing 20-ton trucks, and a system de aerocarril for handling fish inside the building.

Laboratories, administration, and business offices will occupy the second floor of the terminal.

You'll make easier sales,
bigger profits, if it's...

KELVINATOR with the "POLARSPHERE"

Factories, offices, stores! Markets for easy, quick sales! All business men KNOW Kelvinator, the 38-year leader in electric refrigeration!

Only Kelvinator Water Coolers have the hermetically sealed Polarsphere Power Unit. Millions in use! Also... the Pre-Cooler, that almost doubles available cooled water... the spurtless, feather-touch dial... the 5-year warranty! A complete line of Kelvinator Water Coolers... bottle or pressure type, hand or foot operated, cold storage compartments if desired.

National Advertising... for YOU!



Your best prospects read powerful Kelvinator Water Cooler advertising in NEWSWEEK, U. S. NEWS and BUSINESS WEEK. They are asked to call you! That helps you to make quicker sales, bigger profits!

It's Easy To Start Selling Kelvinator!

Just call your local Kelvinator Distributor... he's listed in your telephone directory. Or write to... Kelvinator Water Coolers, 108 Lucas Street, Columbus 8, Ohio, for complete Dealer Information!

THERE IS A BETTER WATER COOLER...

IT'S Kelvinator

The Most Valuable Franchise in the Appliance Industry

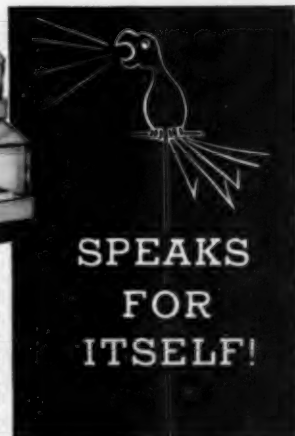


A self-service dairy case that SPEAKS YOUR LANGUAGE... sales success! And ANSWERS THE MERCHANT'S NEEDS... with storage for staple dairy products below... quick turnover for high profit perishables above. Its gleaming beauty calls shoppers to "come see." And they are tempted to BUY, because impulse perishables get top billing on the eye-level upper shelf. That's why this compact display is WORTH REPEATING... with any number set in continuous arrangement. That's why you can sell it again... and AGAIN!

WRITE FOR THE PROFITABLE KOCH DEALER PROPOSITION

KOCH

refrigerators, inc.
NORTH KANSAS CITY 16, MO.



FEATURES THAT MAKE MODEL 206 A NATURAL REPEATER

- Compact 6 ft. length two shelves deep
- Exterior front of white porcelain and stainless steel
- All welded steel construction, heavily insulated with glass fiber
- Front bumper guards against cart damage



HAROLD HAWISHER (R.) of Automatic Heating and Engineering Co., Lima, Ohio, points out the special switch he installed on this 5-ton York air conditioner to control the supplementary steam heating coils. Victor Holtzapfel, plant superintendent of the Holtzapfel Poultry Farm in nearby Elida, looks on. The air conditioner is intended to keep hatching room temperature at less than 80° F. This is necessary to maintain proper temperatures within the hatching units and get the maximum number of chicks.

Modern Poultry Farm

Air Conditioned Incubating, Hatching Room Insures Production of 1.5 Million White Rock Chicks a Year

By John O. Sweet and George M. Hanning

ELIDA, Ohio—Air conditioning is making it possible to produce better hatches than ever before at Holtzapfel Poultry Farm here which claims to be the largest breeder of R.O.P. (regular official production) White Rock chicks in the United States.

Operated as a partnership by Oscar W. Holtzapfel and his two sons, Branson and Victor, the company has been breeding White Rocks exclusively for the past 22 years. This year the firm expects to produce a million and a half quality chicks in its modern plant near Lima for distribution to all parts of the country and even abroad.

In an effort to achieve improved hatches, the Holtzapfels last fall decided to air condition the farm's hatching room. Purpose of the air conditioning is to keep the temperature in the room below 80° F. and the relative humidity at 40 to 45%

so that proper conditions can be maintained in incubating and hatching units.

There are seven incubating units in the room and eight hatching units. Together they can handle 185,000 eggs.

Eggs go first into the incubating units where they are kept for 18 days at a temperature of 99° F. and a relative humidity of 86%. They are then transferred to the hatching units where the temperature is held at 97° F. and the relative humidity at 87%.

In the 21-day hatching process, a considerable amount of animal heat is created. Excessive heat is very detrimental to chick production. If temperatures inside the hatching units rise above 101° F., the chicks will die. So it is necessary to control temperature and humidity to a fine degree.

To help maintain constant tempera-

tures within the incubating and hatching units, each is equipped with a humidifier and a vent through which cool room air is drawn.

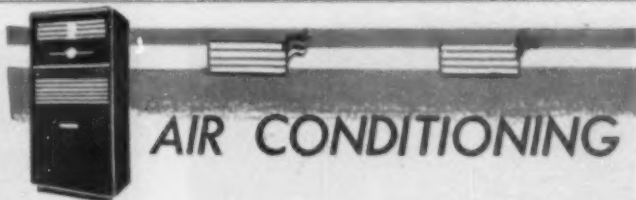
The air conditioning equipment—a 5-ton York packaged unit equipped with steam heating coils—is used during winter months primarily as a ventilator and heater. The cooling coils are used only in the summer when outside air temperatures are too high to keep the hatching room at less than 80° F. A special switch was installed on the panel of the unit to control the heating coils.

The air conditioner is located along one wall midway between the front and rear of the hatching room. A duct runs from the unit across the upper part of the room to enable proper air distribution, while a ceiling-mounted blower unit placed near the front of the room is connected to the air conditioner by a steam pipe. A motorized damper in the outside air duct regulates the amount.

In addition to this equipment, a 48-in. attic fan was installed to exhaust air from the hatching room and the work room in the rear. The air from these rooms is drawn through the entire length of the space between the ceiling and roof. In this way the heated air in this space is evacuated.

The ceiling is insulated with rock wool batts and as the relative humidity is quite high in the hatching room, the exhaust air tends to prevent condensation on the ceiling.

The cooling system was sold by Ed. N. Bouvier and installed by York-Lima Cooling Co., and the heating system by Harold Strayer of Elida. Harold Hawisher of Automatic Heating & Engineering Co., Lima, engineered the over-all job.



AIR CONDITIONING

Complete Air Conditioning Slated for 2nd Dallas Low-Cost Housing Project

DALLAS—Builders James Crow and John Benda have announced that their new 125-unit low cost housing project, the Dallas Pacemaker, will be completely air conditioned.

This makes them the second major builders in Dallas within the past month to include complete year-round air conditioning in their plans.

The building team of Lewis & Lamberth and Laughlin & Silver started the revolt against summer heat last month in the 210-home East Ridge Park development, which has been described as the first large-scale, low-cost housing project in the country to boast complete year-round air conditioning.

The East Ridge Park houses sell for \$12,500 and have General Electric equipment for summer cooling and winter heating.

The Dallas Pacemaker project will have the same equipment. A G-E residential air conditioner and a G-E warm-air furnace will provide cooling, heating, humidification, and dehumidification as needed. A single air duct system will bring the warm or

cool air to each room in the house.

Crow & Benda, whose development will be just across the way from East Ridge Park, decided on including air conditioning in their plans after seeing 25,000 people turn out for the opening of the East Ridge Park homes.

The way the public took to the idea of completely air conditioned homes was the clinching argument for Crow & Benda who were watching the opening with great interest along with other Texas builders.

Jack B. Lowe, president of Texas Distributors, Inc., distributor for the G-E equipment, reports an avalanche of inquiries from other builders as a result of the East Ridge Park development.

General Electric officials believe the public has generally held the opinion that completely year-round air conditioning was prohibitively expensive. They believe the success of the East Ridge Park project proves the practicality of cooling small and medium-sized homes and predict that its impact will be felt far beyond Dallas.

Here's why it's needed

Low lube oil pressure . . . or slow pickup of oil pressure at the start of a cycle . . . can occur unexpectedly and without warning in any pressure-lubricated compressor. When this happens, damage to seals and bearings may result even in the best of refrigeration compressors. To prevent such costly damage, PENN developed the Series 275 Oil Protection Control with built-in Time Delay Switch.



a "MUST" for pressure-lubricated REFRIGERATION COMPRESSORS

Here's how it works

When compressor starts, if the oil pressure does not build up to the proper point within a safe time period, the PENN 275 stops the compressor automatically before damage can occur. If oil pressure drops below a safe minimum during the running cycle . . . and does not rise to normal within the time delay period . . . the control stops compressor operation. Thus, the compressor never operates more than the predetermined safe time on subnormal oil pressure. Result? Positive, automatic protection at all times!

Investigate this new, low-cost protection for refrigeration compressors or for other pressure-lubricated equipment. For complete information ask your compressor manufacturer or wholesaler or write Penn Controls, Inc., Goshen, Indiana. Export Division: 13 E. 40th Street, New York 16, N. Y., U. S. A. In Canada: Penn Controls Limited, Toronto, Ontario.

PENN

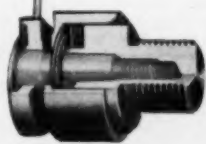
AUTOMATIC CONTROLS

FOR HEATING, REFRIGERATION, AIR CONDITIONING, PUMPS, AIR COMPRESSORS, ENGINES, GAS RANGES

ROTARY SEAL

Replacement Units

UNIT No. 3400



Easy to Install
Efficient in Operation
Simple in Construction
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AVAILABLE FOR MORE THAN 900

COMPRESSOR MODELS

For Commercial, Semi-Commercial, Air Conditioning and Home Refrigerator Compressors . . . proven by 20 years of outstanding performance!

UNITS FOR ALL STANDARD MAKES

AT ALL LEADING JOBBERS

"Seal with



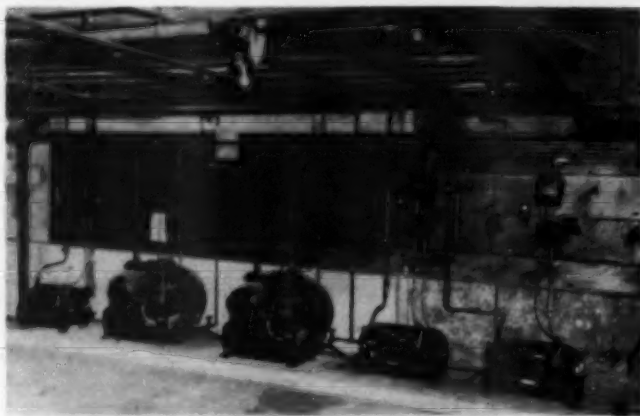
Certainty!"

2020 NORTH LARRABEE STREET
CHICAGO 14, ILLINOIS, U. S. A.

CANADIAN AGENT: 2025 ADDINGTON AVENUE
MONTREAL 28, QUEBEC, CANADA



INTERIOR of "Skip's" Main St. market in Rochester, N. Y., as seen from the front entrance. There are 80 ft. of meat cases in line along one side and a 9-ft. 6-in. poultry case at the far end. Using from 16 to 24 employees, "Skip" sells some 40,000 lbs. of meat, poultry, and dairy products from this store each week.



COMPRESSOR LINEUP serving "Skip's" Main St. market. From left to right are a 1/2-hp. compressor serving the poultry case, two 2-hp. compressors serving the walk-in cooler, and two 1/2-hp. compressors serving the meat cases. All are York units. The installation was made by Cable-Wiedemer, Inc., Rochester refrigeration firm.



ORLANDO "Skip" Leonardo, owner of "Skip's Markets" points through the interconnecting door in the huge walk-in cooler at his Main St. store. This end of the cooler serves the cutting room while the cooler seen through the doorway serves the selling area. By moving the cut meats through this doorway, the meat cutters can keep the selling area supplied without confusing traffic in the cutting room.

Efficient Equipment, Layout Lets Meat Market Handle Big Volume with Minimum of Confusion

ROCHESTER, N. Y.—Out of a small, but clean, bright, attractive, and modern neighborhood specialty store on W. Main St. here, Orlando "Skip" Leonardo sells some 40,000 lbs. of meats, poultry, and dairy products a week.

A specialist in meat merchandising, "Skip" does his high volume business with 80 lin. ft. of Hill closed type meat cases and a single 9-ft. 6-in.

Hill poultry case at the back to form an "L." Only other merchandising equipment in the long, narrow store is a pair of Anheuser-Busch ice cream cabinets set against the opposite wall near the centralized cashier's cage.

This selling equipment is backed up by a huge walk-in cooler—really two coolers interconnected by a cold-storage door. This cooler runs along

one side of the meat cutting room in the rear and forward behind the selling area. Doors enter the cooler from both the selling area and the meat cutting room.

With this setup it was explained, large carcasses as delivered can be quickly loaded into the cooler. From there they can be taken to the cutting blocks as needed by the meat cutters. The retail cuts are then

loaded on platters and placed in the forward part of the cooler behind the selling area. Clerks from the selling area enter the cooler from their own door and replace empty platters in the display cases with full ones as needed.

Meat items already packaged in consumer sizes are also stored in the forward part of the cooler where the clerks can reach them easily. Thus there is no need for traffic jams between meat cutting room and selling area.

During periods when customer traffic is heavy, clerks can move large quantities of merchandise swiftly and efficiently, while the cutters can prepare large quantities of demand items ahead of time. Customers are assured of properly refrigerated meat at all stages.

All the equipment except the ice cream cabinets was sold and installed by Cable-Wiedemer, Inc., local refrigeration firm. Carl P. DiVita, service manager, points out that the installation has another feature that makes it a bit unusual.

All of the cases are served by remote York compressors lined up in the basement. They include a 1/2-hp. unit serving the poultry case, two 2-hp. units serving the walk-in cooler, and two 1/2-hp. units handling three meat cases each.

There are six meat cases in all, five 12 ft. 6 in. long and the sixth 7 ft. 6 in. long. They are set up as a continuous display with no partitions between them. So, to assure even refrigeration throughout the entire display and to minimize the effects of a shutdown of one of the condensing units for any reason, DiVita hooked up the two 1/2-hp. units, so that one handled cases 1, 3, and 5, and the other handled cases 2, 4, and 6.

Thus, DiVita explained, even if one of the compressors were shut down, there would still be cooling effect spread over the entire area until the compressor could be operated again.

He noted, too, that Bush "flash" coils are mounted in the ceiling of the walk-in cooler.

DiVita related that "Skip" Leonardo started out in the meat business four years ago with one small store and used refrigeration equipment. He started with a great drive for work and the belief that there was room for a specialty dealer in meat products who could move meats in volume and do a real selling job. He believes, and still does, in letting fast turnover take the place of long margins, while at the same time actively selling his products to the hilt.

According to DiVita, "Skip" will buy a large quantity of a certain popular cut of meat at a special price and then "trade dollars" on it, with a fast \$100 bill for profit. He will do this to build traffic in his store. Once the customers are in, however, it is up to his meat salesmen—16 of them normally, 24 in rush periods—to sell not only the special but also additional cuts, on which the margin is longer.

This, DiVita said, is the reason why "Skip" has stuck to service-type meat cases in his market rather than adopting the self-service trend of the postwar years. "Skip" did not want the customer coming in for a pound of hamburger, picking it up, and walking out. He wanted his salesmen to have the opportunity to sell her additional cuts of meat she had not thought about before entering the store.

That "Skip" has been successful in his methods is evidenced by the fact that he now operates three such specialty stores around Rochester and is doing a large volume business in all three locations.

USE THE COUPON!

For "easy-to-get" product information . . . use coupon in the "Information Center" form.

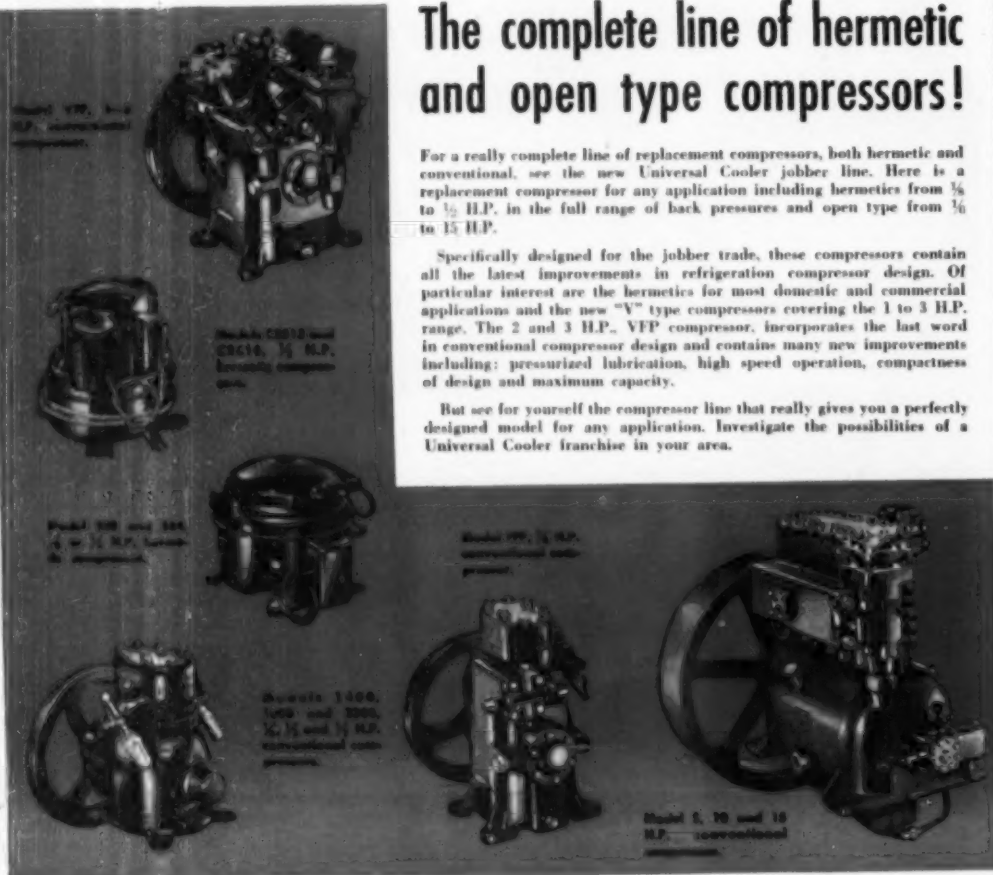
"Jobbers" — SELL THE LINE THAT GIVES YOU THE MOST — Universal Cooler

The complete line of hermetic and open type compressors!

For a really complete line of replacement compressors, both hermetic and conventional, see the new Universal Cooler jobber line. Here is a replacement compressor for any application including hermetics from 1/2 to 15 H.P., in the full range of back pressures and open type from 1/2 to 15 H.P.

Specifically designed for the jobber trade, these compressors contain all the latest improvements in refrigeration compressor design. Of particular interest are the hermetics for most domestic and commercial applications and the new "V" type compressors covering the 1 to 3 H.P. range. The 2 and 3 H.P. VFP compressor, incorporates the last word in conventional compressor design and contains many new improvements including: pressurized lubrication, high speed operation, compactness of design and maximum capacity.

But see for yourself the compressor line that really gives you a perfectly designed model for any application. Investigate the possibilities of a Universal Cooler franchise in your area.



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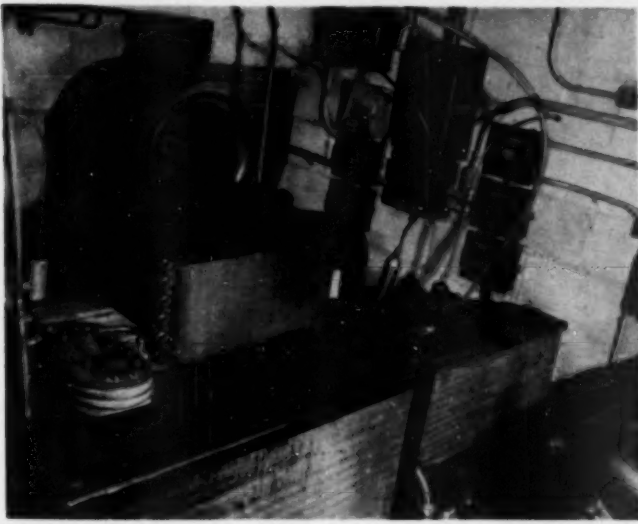


"DISPLAY ALL" glass refrigerator doors are used in thousands of modern markets and wherever there is refrigerated display. They are designed to sell merchandise, enhance appearance and give long lasting, trouble free service.

LET US SHOW YOU HOW "DISPLAY ALL" DOORS WILL MEAN SALES AND PROFIT TO YOU . . . WRITE FOR OUR BROCHURE.

- Unobstructed, brilliant glass
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AMERICAN GLASS REFRIGERATOR DOOR CO.
1828 NORTH LA BREA AVENUE • LOS ANGELES 38, CALIFORNIA



POWERFUL EXHAUST fan at rear made it possible to crowd four air-cooled condensing units, large 10-hp. water-cooled job, and carbonator into small machinery room and let all units operate without overheating even in hottest weather.

Automatic Exhaust Supplies Cool Air For Condensing Units In Crowded Installation

NEW ALBANY, Ind.—With space at a premium and the layout of the building a tough one, the decision of Albert Hess to include air conditioning and modernized refrigeration in the extensive remodeling job on his North Side Cafe here posed some difficult problems for the contractor.

But these were solved, thanks to considerable ingenuity exercised by A. E. Stuckert, who operates Stuckert Equipment Co., Curtis distributor in Louisville, Ky., directly across the Ohio River from New Albany.

Modern appearance of North Side Cafe, both inside and out, belies the fact that originally it consisted of two separate, though adjoining buildings and rather old ones at that. Interconnecting the two involved cutting through brick and concrete walls with a combined thickness of 2 ft.

The right half of the combined buildings now contains the restaurant, soda fountain, kitchen, and a rear dining room, while on the left side is the bar. Both sides, of course, require considerable refrigeration, and in addition are air conditioned.

Space is limited, which prevented the installation of conventional package air conditioners. Further, the "cut-up" arrangement of the building precluded the use of a central station type of system with ducts.

So Stuckert's solution was the installation of a remote 10-hp. "Freon-12" Curtis condensing unit and ceiling type suspended blower units—one in the bar, one in the rear dining room, and two in the soda fountain.

Even running the refrigerant and drain lines from the condensing unit to the coils was no cinch, considering the thick walls, Stuckert admits.

"But after this installation was completed, we discovered the conven-

tional propeller type fans in these blower units made too much noise," Stuckert added.

This problem, too, was solved, by substituting squirrel cage fans in the unit coolers. This was a tricky job, also, because of space limitations within the units themselves.

The 10-hp. unit handling the air conditioning systems is a water-cooled job and is connected to a cooling tower set at ground level directly behind the building.

Unit itself is located in a basement machinery room that must set some kind of a record for compactness. The room measures a mere 10 by 14 ft. with a 6-ft. ceiling, yet in addition to this large unit it contains four more condensing units—a ¾-hp., two 1-hp. machines, and a 1½-hp. unit, all air-cooled, plus a carbonator, and a large exhaust fan driven by a 1½-hp. motor. The latter is what makes it possible to pack all this air-cooled equipment in such a small space.

"Originally," explains Hess, the owner, "we had the condensing units upstairs but we couldn't get enough air to them. And even water-cooled units didn't perform too well. To give ourselves more space we decided to put all the machines in the basement we dug at the rear, but they wouldn't have worked there without the air exhaust system devised by Stuckert."

This blower is controlled automatically by an air switch and pulls air into the machinery room through a louvered door. The four machines with air-cooled condensers were installed so that the air pulled into the machinery room by the fan blows through the condenser coils in the normal direction.

A duct joined to the fan housing



REMOTE BLOWER units were used to air condition restaurant (as well as bar and dining room) due to space limitations. Contractor substituted squirrel cage fans in units to eliminate noise.

with a canvas connection leads up to the roof to exhaust the hot air there. During the winter, of course, the exhaust fan is seldom needed. In fact, some heat may be required in the machinery room, but this is supplied by a small electric heater.

"We've had absolutely no trouble with these air-cooled units getting too hot in summer and cutting out," Hess reports.

This is important, because the four units supply the refrigeration needed for the bar, restaurant, and soda fountain fixtures and boxes.

Incidentally, the lines from the units to the various fixtures run mostly in trenches directly beneath the fixtures, going through "green-leaf" when they pass through walls or the floor. This makes for a neat arrangement and helps save space.

Arthur Moody Joins Trane Product Engineering Dept.

LA CROSSE, Wis.—Arthur Moody has recently joined the product engineering department of The Trane Co., manufacturer of air conditioning, heating, and ventilating equipment, it was announced by R. E. Lucey, vice president.

He will work on the design and development of air conditioning and refrigeration products.

Moody had been associated with the Elliott Co., Jeannette, Pa., as chief engineer of Blower Div. for the past six years.

Prior to 1945, he was chief research engineer with DeLaval Steam Turbine Co., Trenton, N. J.

D. B. Paquin Is Elected White-Rodgers Vice Pres.

ST. LOUIS—D. B. Paquin was recently elected a vice president of White-Rodgers Electric Co.

His responsibilities include purchasing, production control, machine accounting, and statistical functions. Paquin previously was connected with A. T. Kearney & Co., Chicago, management and industrial consulting engineer.

Cole Named Airtemp Dealer

COLUMBUS, Miss.—Cole Refrigeration and Electric Co. announced recently its appointment as dealer in the Columbus trade area for Chrysler Airtemp air conditioning. The firm is headed by Jerry Cole.

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METHYL CHLORIDE

DISTRIBUTORS OF
DU PONT "FREON" REFRIGERANTS

ANSUL

REFRIGERANTS AND REFRIGERATION PRODUCTS



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AMERICA'S FINEST, MOST COMPLETE

BEVCO

Line of
COOLERS



WET OR DRY



WATER FITTINGS



SINGLE FAUCET



DOUBLE FAUCET



MOUTH BUBBLER



HEAVY DUTY ROLLER CASTERS

Render your cooler mobile for convenient service.

QUALITY COOLERS YOU CAN FIT INTO YOUR LINE and SELL AT A PROFIT

You sell quality, trouble-free cooling in these electric units that operate wet or dry. In 3 sizes . . . 4, 5, 6 ft. Unobstructed interiors. Baked Enamel finish for beauty and sanitation.

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ANSUL OIL

THE FINEST REFRIGERATION LUBRICATING OIL at any price!

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BUY IT NOW AT THE NEW LOW PRICE. Use it for more dependable, trouble-free lubrication.



Ansul has greatly increased its Research facilities — expanded its Research Program — and added new modern Pilot Plant facilities to better serve the Refrigeration Industry.

ANSUL SULFUR DIOXIDE • ANSUL METHYL CHLORIDE
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Ansul is a national leader in the distribution of DuPont's (Kinetic) "Freon" products. Users turn to Ansul for all their Refrigerant needs and enjoy the benefits of dealing with pioneers and leaders in the field of Refrigeration.

There is an Ansul Wholesaler near you. Take your problems to him. The help of his organization of capable technicians, with the backing of the entire research and engineering staffs of Ansul Chemical Company, are yours for the asking — at no cost or obligation.

ANSUL

CHEMICAL COMPANY

REFRIGERATION DIVISION
MARINETTE, WISCONSIN

They'll Do It Every Time By Jimmy Hatlo





Current LITERATURE available

To obtain further information on the literature listed below, please refer to key number preceding listing. Please use the "Information Center" form on "What's New" page.

Brazing Manual Tells How In Language of Operator

—KEY NO. N-520—

WHITE PLAINS, N. Y.—A new type of brazing manual, recently published by All-State Welding Alloys Co., Inc., is entirely operator written in the unedited language of the men behind the torch.

The publication is titled "Brazing Manual" and contains data for brazing shapes, sheet, castings, tubing and assemblies of copper, brass, steel, aluminum, and cast iron.

The practical aspects of brazing, such as is found in the air conditioning, refrigeration, and other service trades, are fully covered. Plain words and diagrams clear up and simplify a number of points in the joining operation and show clearly how good sound joints can be made without the operator having to be very expert in the art of welding or brazing.

Copies of the new 16-page, illustrated manual are now available.

Add FHP Motor Slidefilm to G-E Motor Selection Course

—KEY NO. N-521—

SCHENECTADY, N. Y.—A 35-mm. black-and-white sound slidefilm and allied literature on "Selection and Application of Fractional Horsepower Motors" has been announced by General Electric Co.

It is an addition to the company's motor selection course, a training program launched last year as No. 22 in the G-E "More Power to America" series.

The new film (running time 21 minutes) describes the broad uses of FHP motors in the home, on the farm, in factories, and offices. It explains the five different kinds of motors in the FHP family: a.c.

single-phase types (capacitor, split-phase, and shaded-pole), and a.c. polyphase and d.c. types.

With photographs, charts, graphs, and cartoons, the slidefilm outlines the basic steps that must be considered in selecting and applying any motor, and shows how they work in FHP sizes.

The original motor selection course, to which the new film will be added, is an educational program designed to aid in the rapid training of industrial personnel in the selection and application of modern electric motor drives. Devoted to the task of quickly indoctrinating qualified personnel in the nation's factories as an aid to industrial mobilization, the course has had wide use since it became available in April, 1951.

The course consists of nine slidefilm "lessons" (each with a 16-in. sound recording), 10 copies each of nine student review booklets on the lessons, and an instructor's manual, all packaged in a luggage-type carrying case.

The complete course is available for single showings by contacting G-E apparatus offices, or it can be purchased outright from the company.

Solderless Terminal Catalog Depicts Vaco Products Line

—KEY NO. N-522—

CHICAGO—Availability of its new "Lynn Lightning Solderless Terminal" catalog has been announced by Vaco Products Co. here.

Illustrated with numerous two-color photographs and "how-to" drawings, the catalog depicts the complete line of over 35 different types of solderless terminals and connectors, crimping tools, self-service display boards, and merchandising aids, plus display for holding service kit and terminal cross reference chart.

Book on Sound Recording, Reproduction Enlarged

—KEY NO. N-523—

NEW YORK CITY—An enlarged second edition of "The Recording and Reproduction of Sound" by Dr. Oliver Read has been published recently by Howard W. Sams & Co., Inc.

With more than 800 pages, the book contains all the revised and latest information on the subject of recording and reproducing sound. It covers the behavior of sound waves, basic recording methods, microgroove recordings, phono reproducers, style, public address systems, amplifiers, attenuators, and mixers.

Burling Catalog Describes New Temperature Controls

—KEY NO. N-524—

SOUTH ORANGE, N. J.—Burling Instrument Co. here has announced publication of a new 12-page illustrated catalog, No. G-17, which describes its full line of temperature controls.

Special features of this catalog are data on four new instruments and inclusion of tables of application and performance for all instruments.

The new additions include the model V-1C, an electric type with a vapor tight cover; the model HA, for use in pneumatic systems; and the various models Y, temperature controlled valves.

Covered also is the use of Burling controls for temperatures from -300° to 1,800° F. and in various severe applications.

A copy of catalog G-17 will be mailed on request.

Savings with Refrigeration Shown In New Booklet

—KEY NO. N-525—

MANSFIELD, Ohio—Helping the homemaker get the most out of her refrigerator and achieve food and money savings with proper refrigeration is the purpose of a new booklet announced recently by the Westinghouse Home Economics Institute.

Called a reference handbook on Electric Household Refrigeration, the 32-page booklet was written by Mrs. Julia Kiene, director of the Institute. Designed primarily as a teaching aid handbook, it is illustrated with sketches and photographs and is written in non-technical terms.

The new booklet explains the need of refrigeration, the proper storage of foods, vitamin retention, and the successful home freezing of foods. Chapters on modern household refrigerators and home freezers describe the types of equipment available, construction features and instructions for care and use.

Copies of Electric Household Refrigeration (booklet ICE-0202) are available at 5 cents each.

Book Tells How To Sell Retail Advertising by Plan

—KEY NO. N-526—

NEW YORK CITY—A retailer's advertising guide to top sales results called "Selling Retail Advertising by Plan" has been issued by the Bureau of Advertising, American Newspaper Publishers Association. Copies of the 150-page outline may be obtained from the Bureau.

Kennard Bulletin Gives Specs on Cooling Towers

—KEY NO. N-527—

ST. LOUIS—A four-page bulletin KT-1 describing Kennard induced draft cooling towers with centrifugal type fans has been issued by Kennard Corp. here. The bulletin illustrates and describes the units, giving complete specifications.

Sweden Issues Case Study Folder on Fountain Lunch

—KEY NO. N-528—

SEATTLE—How a fountain freezer will cut labor costs, speed service and make money for a restaurant, lunch counter, or any establishment that sells ice cream is the story told in a little folder issued by the Sweden Freezer Mfg. Co. here, that is available on request.

"The Sweden Method at the Mocha Shop" is the title of the folder that tells how a Seattle fountain lunch operator reduced his labor and food costs by installing two freezers, one for making a complete milk shake and the other for serving almodo dishes, sundaes, and dishes of the soft-served product popularly known as "freeze" or "creme."

Not only did the Mocha Shop cut labor costs by installation of two freezers, but food costs at the fountain dropped to the point that made possible reducing the price of milk shakes to 25 cents from 30 cents.

The cost of making a shake with the Frigidmixer is estimated at eight cents. As for labor, due to the time and work saved by the freezers, the number of waitresses employed was reduced from six to four.

PRESSURE DROP is important

Excessive pressure drop through a poorly designed heat interchanger can offset all the gain to a system and do more harm than good. Exclusive longitudinal fins in all Heat-X interchangers provide for low pressure drop and high heat transfer, resulting in improved expansion valve performance, lessening of oil foaming troubles, and many other advantages contributing to a more efficient installation.

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THE HEAT-X-CHANGER CO., INC.
BREWSTER, NEW YORK

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For many years it was believed that water in the refrigerant was no problem, because freeze-ups did not occur in comfort cooling. But today we know that the moisture in these systems causes corrosion, acidity, oil contamination and sludge. This condition becomes even more critical on hermetic compressors causing breakdown of insulation on the motor windings with resultant burn-outs. Here again only Sporlan Catch-Alls with their exclusive drying ability can remove the moisture, reduce the acidity and eliminate all the problems caused by moisture.

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When you want perfectly clean, perfectly dry refrigeration systems... install Sporlan Catch-Alls, the perfect Filter-Drier, and get Peak Performance on All Installations.

Buy SPORLAN right down the line!

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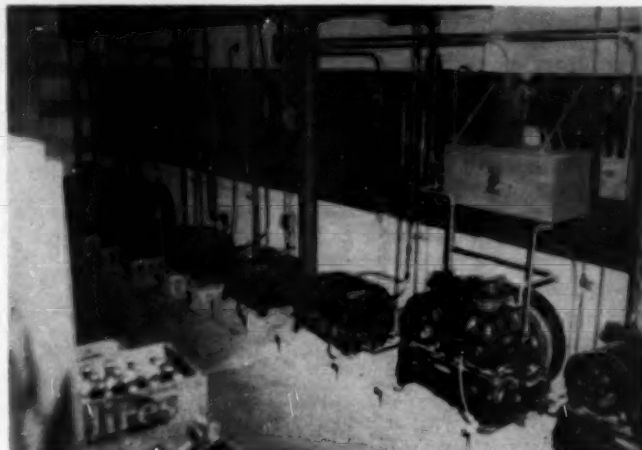
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EXPORT DEPARTMENT
89 BROAD STREET NEW YORK 4, N. Y.



LEFT: Bright and attractive is the meat department in the new Craft & Clarke market in Rochester, N. Y. Ray Craft, partner, stands behind a Hussmann case brought from the firm's old store. It is the only service case in the new market. All the others are new Hill self-service units. Public is invited to inspect the meat cutting and packaging room at rear. Clarke himself caught the fish mounted overhead.

RIGHT: One air-cooled and six water-cooled York compressors are in this lineup serving the Craft & Clarke market. Two large walk-ins are directly behind this battery. The cooling tower is on the opposite side of the basement, off to the right.



Loaded with Refrigeration

Small Market Prospers with Lots of Self-Serve Cases on Ground Floor and Walk-Ins In Basement

ROCHESTER, N. Y.—When Craft & Clarke opened a new Red & White food store in the north end of town, they made sure they had plenty of refrigeration facilities.

The entire selling area is ringed with refrigerated cases, while the basement contains two large walk-ins, a battery of compressors—all but one are water-cooled—and a cooling tower.

The entire installation was made by Cable-Wiedemer, Inc., local re-

frigeration firm. They put in C. V. Hill equipment throughout.

The self-service market, which is of the small neighborhood variety in a fast growing new community, contains three Hill model 256 self-service dairy cases, three Hill model 82FF frozen food cases, two model 41R meat cases, one 8 ft. 6 in. long and the other 11 ft. long, and two 11-ft. model 55VR vegetable cases. In the lineup there is also a Hussmann closed type meat case, brought over from

the firm's other store.

Craft & Clarke offers its customers both self-service and counter service in the meat department and invites them to visit the meat cutting department where two women packagers and three meat cutters operate. The meat cutting department is fully visible from the store and easily accessible to customers who wish to take advantage of the invitation.

Backing up these facilities are a 14 by 15 by 8-ft. vegetable walk-in

and a 8 by 15 by 8-ft. freezer walk-in. The compressor row is located right behind the two walk-ins. Only air-cooled unit is a 1½-hp. York unit that serves the closed meat case.

The water-cooled York units are a 3-hp. compressor to serve the three frozen food cases, a 1½-hp. unit for the two vegetable cases, a 1-hp. unit for the two open meat cases, a 2-hp. unit for the three open dairy cases, a 1-hp. unit for the vegetable walk-in, and a 2-hp. unit for the freezer walk-in.

All of the compressors are mounted on cement blocks to help absorb the vibration, according to Carl DiVita, service manager for Cable-Wiedemer. Water lines run at ceiling level across the basement to a cooling tower located on the far side.

DiVita recalled that he ran across an unusual problem with this installation that he solved only by the merest chance.

It seemed that every day or two, the 1½-hp. compressor would blow a fuse for no apparent reason. There was plenty of power in the building to handle the complete load, so there was no question of low voltage.

Servicemen were sent out several times to find the difficulty, but though they searched diligently, they could discover no reason for the fuses to blow. In fact, while they stood by and observed, nary a fuse was blown. The compressors worked perfectly.

Ray Craft, partner in the market, naturally was getting angrier and angrier as fuses continued to blow and the servicemen could do nothing to prevent it.

One day DiVita was out checking over the installation after a fuse had blown and was searching his brain to discover what possibly could be the matter, when by the merest accident, the trouble revealed itself.

While Craft and DiVita stood by discussing the problem, the 2-hp. compressor for the dairy cases, the 3-hp. motor for the cooling tower,

and the 1½-hp. compressor for the meat case all started up at the same instant. There was an arc at the switch box as the fuse on the 1½-hp. unit blew again.

From this, DiVita discovered that the wire used in hooking up the circuits was not big enough to carry the entire load in such circumstances. So he immediately had the entire job rewired with heavier wire and the store has not had a repetition of the trouble since.

Mahoney Returns to Acme From Duty Tour with NPA

JACKSON, Mich.—Joseph T. Maloney, sales executive for Acme Industries, Inc., has returned to Jackson, resuming his position with the company. He has just completed a six-months tour of duty with the National Production Authority and was on loan to the Government during that time.

While with the NPA Maloney was the industry analyst with the air conditioning and refrigeration section of the general industrial equipment division. He was associated with Gordon Wootton, chief of the air conditioning section, the department handling the allocation of vital metals.

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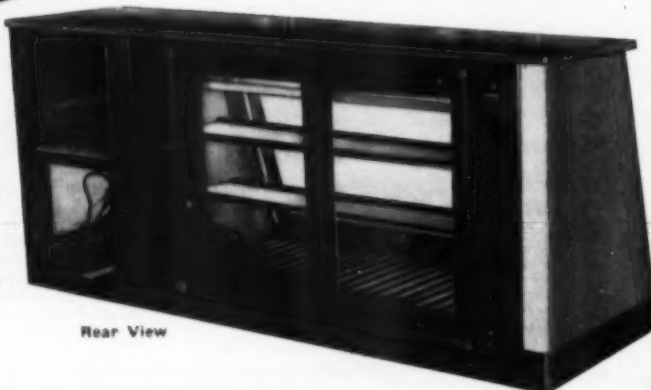
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Rear View

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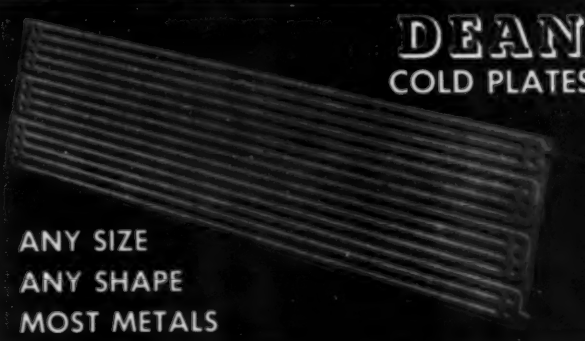
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Lucky Loss

Druggist Loses Lease But Boosts Volume With Modern Equipment In New Store

SEWARD, Neb.—Druggist Adolph Vahl didn't think so at the time, but it was fortunate that he unexpectedly lost his lease on his store on the west side of the court house square here.

In arranging for a new space on the north side of the square—in a location no better or worse than the old one, Vahl decided to discard all his old fixtures and equipment and start fresh with a completely modern layout.

The results indicate just what full modernization can do for a small-town druggist: In a six-months' period, sales climbed one-third above the same period of the preceding year.

Modernization included year-round air conditioning, a new fountain, a self-service case for packaged ice cream, and addition of an animal health department equipped with a refrigerator for vending biologicals. Cost of the program has been fully justified through increased trade, according to the druggist.

OLD FOUNTAIN GOES TO COLLEGE

As part of his "house cleaning," Vahl gave his old fountain to Concordia college of Seward for use in the school's snack bar. The new Bastian-Blessing fountain in the new store was producing 300% greater volume than the old one did.

Concordia students are well represented among fountain clientele. Although there are two other drugstores in this town of 3,300 population, the Vahl fountain has become the gathering place for young folks of college age on down.

The fountain has 10 stools, while an adjoining booth section has upholstered seats for 12 persons. The fountain section, as well as the remainder of the store, is finished in a maroon and grey color scheme.

A 10-compartment Frigidaire case for ice cream is included in the fountain equipment. The backbar is mirrored and the lower section has enclosed compartments for storage of glasses, cartons, napkins, etc.

Vahl enlisted the services of an architect in planning his new store

which includes full-view front, asphalt tile flooring, the fluorescent lighting fixtures of the modern grill-type. Center islands have frame of chrome-plated tubular steel with glass shelving. The open prescription department at the rear is finished in white.

ANIMAL HEALTH DEPARTMENT

In planning the new layout, the druggist decided to make a bid for the animal health business in the prosperous rural trade area. So an animal health department was installed, across from the prescription department, and appropriately designated by cut-out block letters at the top.

A 10-ft. wall fixture with adjustable shelving displays the animal health products, and a niche was built at one side of the fixture just big enough to accommodate a Norge vending refrigerator for biologicals. Vahl said the refrigerator not only saves steps to the prescription department refrigerator when farm customers call for antibiotics, but serves as an effective display fixture as well. Many farmers serve themselves from the refrigerator and it adds a professional touch to the new department which has shown an increase in sales every month since it was inaugurated.

Another new piece of equipment which the Seward druggist tried for the first time was a self-service Frigidaire case, located near the center of the floor, for packaged ice cream. A backbar has four shadow-boxes depicting ice cream dishes in color. Take-out ice cream sales have far exceeded the total for the entire fountain in the old store, and business is almost as good in the cold season.

The excellent insulation of the store caused the architect to recommend a 3-hp. air conditioning unit. Vahl was skeptical, but purchased a Chrysler Airtemp self-contained unit of that size and had it installed on the east wall between the booth section and fountain proper.

One hot day last summer he decided to see just what the unit would

do so he opened it up. Within an hour's time the store temperature had dropped to 68° and he had to turn the unit down.

All remote compressor units were mounted on a platform in the full basement for easy accessibility. The basement storage room, which has fluorescent lighting and an elevator running from the checking room on first floor, also houses the automatic gas heating unit and a large Frigidaire freezing case to hold a reserve supply of ice cream. Since the ice cream must be trucked from Lincoln, 26 miles distant, the reserve case has proved a necessity on hot days.

Vahl pointed out that his increase in sales has been due entirely to modernization, since the location is no better than the one he vacated.

New Loblaw's Has 100% Self-Service Meat Dept.

ROCHESTER, N. Y.—Extensive use of self-service refrigerated cases features the newly-opened Loblaw's supermarket at 1731 N. Clinton Ave.

The 100% self-refrigerated meat department has a series of refrigerated cases holding meats which are prepared and pre-packaged right in the store. The meat cutting and preparation department is air conditioned.

Another large user of refrigerated fixtures is the frozen foods department, featuring frozen fruits, vegetables, juices, poultry, sea foods, and ice cream.

The dairy department uses refrigerated cases for the display of milk, butter, eggs, cheese, and other dairy products. Fresh fruits and vegetables also are shown in refrigerated cases.



"Slants on Service" is a "package" devised by the NEWS to meet the needs of its busy readers in the service and contracting business.

How To Pull Flywheels In Least Possible Time

Knowing how to pull stubborn flywheels is a thing that can save you a lot of time and avoid a lot of profanity, says W. Tegner of Oakland, Calif. Here is a way that has proven to be very successful when pulling odd spoke or stubborn flywheels.

Take a chain puller, put it in place and turn it up tight so that it has a good strain on the flywheel. Next apply the flame of a Presto torch to it and when it pops it will be loose.

You will find that you can remove a flywheel this way in a few minutes where you might have taken a long time some other way.

Torch Burns Up Carbon Clogging Liquid Line

At times the liquid line has been known to clog up. This may be found by tracing the liquid line from the machine and looking for a spot where the liquid line starts to frost or sweat. As this is usually caused by a clot of carbon, it can be done away with like this.

Apply the flame of a Presto torch

to the spot and a couple of inches ahead of it and get the tubing hot. This burns up the carbon, and the dust that remains is washed away by the onrushing gas.

A clogged liquid line is usually easily found as the machine will have a high head pressure and the receiver and condenser will be full of gas.

This Trouble Light Can Be Clamped On Anywhere

Very often you will be called to work on a commercial job or apartment house job where the condensing unit is tucked away in some dark corner or basement. At times like this, you will find it very handy to have a light that you can use anywhere.

One serviceman solved this problem by taking a trouble light, cutting off the plug, stripping part of the cover off and attaching a couple of insulated battery clamps to the leads. When he runs across a job that is 220 volts, he merely fastens one of the clips to one side of the switch and the other to the switch box to get his 110 volts.



Moisture free refrigeration can be yours if you use PA-100. Tests prove PA-100 can dry refrigerants to moisture levels that cannot be reached by other refrigerant drying agents. And PA-100 cannot cause corrosion . . . actually helps prevent it by removing corrosive compounds from the system.

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THE WATCHDOG OF THE NATION'S FOOD SUPPLY



Refrigeration Design and the Serviceman

Baragar Urges Close Cooperation Between Manufacturer And Serviceman To Assure Industry of Satisfied Users

GRAND RAPIDS, Mich.—"Close cooperation is required with determined effort from both the manufacturer and the serviceman if successful merchandising, servicing, and satisfied users are desired," J. M. Baragar, general manager for Johnson Refrigeration Sales Co. in Detroit, told the Western Michigan section of ASRE here recently.

Discussing "Refrigeration Design from the Serviceman's Angle," Baragar pointed out that "for some odd reason there has always been a bone of contention between the refrigeration service engineer and the designer of refrigeration equipment. The feeling exists with a large number of servicemen that the product engineer sometimes doesn't know which end is up. And, I am sure, there are many product engineers who feel the same way about the serviceman."

REASONS FOR LACK OF UNDERSTANDING CITED

"The reason for this is because of a lack of understanding of the mutual problems that exist between these two groups. To play fair with both sides let's examine what each should expect from the other."

"If the manufacturer expects volume production, volume sales, customer acceptance and a net profit on the product he manufactures," Baragar said, "he will have to give to the service engineer, the distributor, and the parts wholesaler seven

basic items, namely:

- "1. Proper application design.
- "2. Good design for service.
- "3. Well written service manuals.
- "4. Direct contact with field personnel from the factory.
- "5. Sympathetic understanding by the manufacturer of the serviceman's problems.
- "6. Availability of parts replacement and manuals.
- "7. A full backing from the manufacturer on his warranty.

"Let's review these seven basic items in greater detail. Proper application design means simply to the serviceman a product that will do successfully and reasonably economically what the manufacturer claims for it."

"Good design for service permits the good serviceman to intelligently maintain and render service that may be required. A typical example of good application design with poor service features reminds one of the expansion valve manufacturer who a few years ago designed a thermostatic expansion valve that maintained a very constant super-heat, did not hunt and functioned quite well in every respect."

"However, the designer of this valve neglected to make allowances for wrench flats that would permit this valve to be easily installed and removed. The net result was that the service engineer and subsequently the wholesaler refused to handle this product because it was difficult to

service in the field," Baragar declared.

"Well written service manuals should contain in detail the entire product story as well as exploded views of component parts permitting the good serviceman to intelligently analyze the product and to become familiar with what must be done. Further, the service manuals should contain pressure control settings, recommended operating pressures, and any other pertinent information."

"Direct contact with field personnel from the factory, in my opinion, is the surest way to guarantee complete acceptance of your product," he said. "By permitting the refrigeration service engineer direct contact with your field man he is able to absorb completely your product story, your service information, and actual working experience that will enable him to do a better job for you."

NEED FOR REPLACEMENT PARTS AT LOCAL LEVEL

"One of the most important steps the manufacturer can take to further insure success is to make available on a local basis parts for replacement purposes. One very large company with whom I am familiar increased its volume tremendously by setting up a definite parts program making available to everyone in our industry immediate replacement of parts."

"When the manufacturer has established a definite warranty policy

with regards to his equipment it should be backed up to the hilt. If there is a question of doubt, always give your customer the benefit of it."

"The manufacturer needs and has the right to expect from a distributor, from the wholesaler, and from the serviceman, the following:

- "1. Good service engineers.
- "2. Constructive help from the field, not criticism alone.
- "3. Loyalty to his product, providing it deserves it.

"We in the service field should also remember that the product engineer or design engineer has a real problem facing him when it comes to the design of refrigeration equipment. The sales division of a manufacturer usually asks of the product engineer the impossible. He wants perfection designed to fit into a space 2 in. sq., it must cost at least 50% less than the competition, and the darn thing has to be manufactured on a drill press."

"The above statement is, of course, a little far-fetched, but to some product engineers, sales company demands are almost as ridiculous. It is, however, the engineer's problem to design a reasonably good product within a limited space at a competitive price and he has to be sure his factory has the tools and equipment to produce it on a volume basis. It would be well for the service engineer, or the distributor, or the wholesaler to bear the above facts in mind before he criticizes too quickly any product he may handle."

DON'TS FOR BOTH MANUFACTURER, SERVICEMAN

"In closing I have listed some 'don'ts' for both manufacturers and the field. Under a few suggestive 'don'ts' for the manufacturing end I include the following:

- "1. Don't design too close.
- "2. Don't sacrifice quality too far for price.
- "3. Don't ridicule constructive field criticism.
- "4. Don't be an educated fool.
- "In 'don'ts' for service:
- "1. Don't be too ready to condemn a product.
- "2. Don't service unless you do it right.
- "3. Don't refuse advice from competent factory help.
- "4. Don't blame your own shortcomings on the product.
- "5. Don't think you know it all, because you don't."

M-H Promotes Wilson To Field Sales Position

PHILADELPHIA—O. B. Wilson has been made field sales manager for the Industrial Div. of Minneapolis-Honeywell Regulator Co., it was announced recently by L. Morton Morley, vice president of Honeywell and its Brown Instruments Div.

Wilson succeeds William H. Steinkamp who was recently made general sales manager of the division. Wilson will supervise all industrial field sales and service personnel for all Industrial Div. products.

Johnson Service Elects Director, Five Officers

MILWAUKEE—Johnson Service Co., manufacturer of automatic temperature control systems, announced the election of one new director and five new officers at its annual meeting.

The new director is J. S. O'Gorman, Jr., manager of Johnson's Detroit branch, who fills the vacancy left by the late O. G. Ward.

New vice presidents are J. R. Vernon and Paul Gayman, both of Milwaukee, and K. A. Wright of Chicago. Vernon will continue as sales promotion manager and Gayman will continue as manager of the company's western district. Wright, former Cincinnati branch manager, is now manager of the central district with headquarters in Chicago.

L. V. Zacharyasz was promoted from assistant secretary and assistant treasurer to secretary and assistant treasurer. Herbert H. Koepke was elected assistant secretary and personnel manager.

Re-elected officers and directors were J. A. Cutler, president; A. J. Otto, vice president and works manager; and R. J. Murphy, vice president and treasurer, all of Milwaukee.

E. W. Hoffmann, Milwaukee, C. P. Vogel, Milwaukee, R. M. Henry, Evanston, Ill., C. F. Johnson, Pasadena, Calif., and Seymour F. Johnson, Santa Barbara, Calif., were re-elected directors.

Other officers re-elected are C. A. Otto, vice president and chief engineer of Milwaukee, and M. F. Rather, New York City, vice president and eastern district manager.

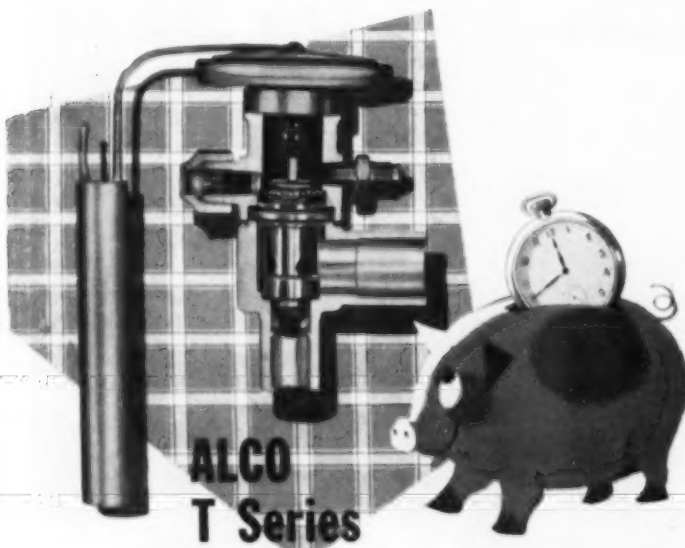
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the "Scotch" valves—save you time two ways

1. **EASY TO SERVICE ON THE LINE**—remove two cap screws; lift off power assembly; take out the cage assembly. Now you're ready to inspect and clean the valve or replace parts.
2. **EXTERNAL SUPERHEAT ADJUSTMENT**—just remove seal cap on side of the valve and turn adjusting stem. It's that simple!

Available with internal or external equalizer. Capacity from 1/2 to 30 tons "F-12". There is a T-Series Valve for all temperatures and all refrigerants.

For further details, send for Bulletin 171.

SEE YOUR ALCO WHOLESALE!



Designers and Manufacturers of Best
Known Expansion Valves, Evaporators,
Pressure Regulators, Solenoid Valves,
Heat Exchangers, Heat Exchangers

ALCO VALVE CO.

212 KINGSLAND AVE. • ST. LOUIS 3, MO.

PARAGON DEFROSTING TIME SWITCHES

300-M SERIES

From \$16⁰⁰ List

FOR COMMERCIAL DEFROSTING — Electric Heat • Hot Gas • Compressor Shut-Down

THE FINEST TIME SWITCH YOU CAN USE

FOR
UNIT COOLERS • WALK-IN BOXES
FROZEN-FOOD DISPLAY CABINETS
LOCKER PLANTS • REACH-IN CABINETS
• FREE-STORAGE VAULTS

Paragon 300-M series offers you the finest in accurate, durable, precision-built time switches for all types of commercial defrosting applications where defrost period is two hours or less. Easy-to-set pin-type dial for up to 8 periods per day. Heavy hinged case; unbreakable door glass. Also made in heavy-duty outdoor type, Series 330.

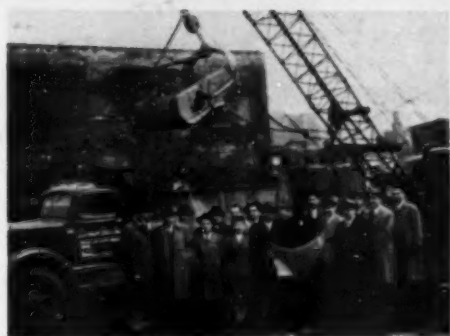
See your jobber or write to:

Paragon ELECTRIC COMPANY
1487 TWELFTH STREET • TWO RIVERS, WISCONSIN

AMERICA'S LARGEST EXCLUSIVE MANUFACTURER
OF TIME CONTROLS FOR ALL USES

Makers of the famous "do-frost-it" for domestic refrigerators

Service & Supplies



Harry Alter Breaks Ground for New Addition

EXECUTIVES of the Harry Alter Co. and representatives of both Crosley Div. and Coleman Co. pictured at the "ground-breaking" ceremonies of the new plant addition to the present facilities of the company in Chicago. This will be a one-story sprinkler-equipped building 100 x 164 ft. designed and engineered by A. Epstein & Sons of Chicago. This addition, according to Harry Alter, president, will house several departments providing room for expanding activities, particularly in the sales and service departments. Alter said that this expansion is to provide adequate facilities for an ever expanding market.

Parts and Appliance Wholesale Sales In First Quarter Drop Below '51; March Also Down

WASHINGTON, D. C.—All wholesale durable goods trades reported that sales in the first quarter of 1952 fell below the corresponding period of 1951, according to the Bureau of the Census, with the sharpest decline—39%—being experienced by electrical appliances and specialties.

Sales of refrigeration equipment and parts wholesalers were off 21%.

In March, sales of appliance and specialty wholesalers dropped 36% under a year ago and were down 8% from February, 1952. March sales of refrigeration equipment wholesalers skidded 22% compared with March, 1951, but rose 7% compared with February.

Appliance and specialty wholesalers' inventories at the end of March were 11% less than a year ago but

8% higher than on Feb. 29. Inventories of refrigeration equipment wholesalers gained 7% compared with a year ago and 2% compared with the end of February.

March sales of all wholesale trades reporting to the bureau advanced 2% over the previous month in a gain smaller than the normal seasonal trend, the agency said. However, March sales dropped 10% under a year ago.

First-quarter 1952 sales lagged 11% behind the corresponding period of 1951, reflecting sales declines from last year reported in each month thus far this year.

U. S. wholesalers' inventories were up 2% over the Feb. 29 level but down 1% below stocks on hand March 31, 1951.

Sales

Kind of Business and Geographic Division	Per Cent Change			March 1952 Panel	No. of Firms Reporting	Reported Dollar Values (add 000)
	Mar. 1952 from Mar. 1951	Mar. 1952 from Feb. 1952	3 Mos. from Feb. 1951			
Appliances and specialties wholesalers	-36	-5	-39	109	20,504	
New England	-61	-5	-46	8	1,378	
Middle Atlantic	-45	-9	-47	22	7,322	
East North Central	-42	-19	-45	18	2,353	
West North Central	-32	-6	-34	14	1,222	
South Atlantic	-24	-6	-36	30	3,333	
South Central	-19	-7	-21	13	1,561	
Mountain	-20	-9	-23	7	1,007	
Pacific	-9	+4	-27	7	2,808	
Refrigeration equipment, parts (room)	-22	+7	-21	56	1,648	
Middle Atlantic	-16	+16	-17	15	592	
East North Central	-18	-3	-23	8	135	
South Atlantic	-14	+11	-19	30	481	
South Central	-14	-14	-4	4	152	
Pacific	-47	-3	-36	6	120	

Inventory, End-of-Month (At Cost)

Kind of Business and Geographic Division	Per Cent Change			March 1952 Panel	No. of Firms Reporting	Reported Dollar Values (add 000)
	Mar. 1952 from Mar. 1951	Mar. 1952 from Feb. 1952	3 Mos. from Feb. 1951			
Appliances and specialties wholesalers	-11	+8	45	27,187		
New England	+10	0	5	1,590		
Middle Atlantic	-28	+9	12	6,447		
East North Central	-10	+10	13	2,775		
West North Central	-27	-2	12	2,949		
South Atlantic	0	+11	19	4,787		
South Central	-3	+15	11	2,889		
Mountain	+19	+9	7	1,724		
Pacific	-7	-4	6	3,006		
Refrigeration equipment, parts (room)	+7	+3	45	4,287		
Middle Atlantic	0	+1	12	1,369		
East North Central	0	0	0	0		
South Atlantic	+15	+1	30	1,503		
South Central	0	0	0	0		
Pacific	+23	+10	5	457		

*Insufficient data to show separately

New G-E Booklet Gives Data On Water Cooler Placement

BLOOMFIELD, N. J.—A new booklet describing how the proper placement of water coolers can save payroll dollars by cutting wasted man-hours is now available from General Electric Co.

Entitled, the "G-E Work Center Plan for Water Cooler Placement,"

this booklet is based on an extensive study made by G-E of the drinking water requirements of industrial plants and offices. It contains sample floor plans for proper placement of water coolers, a five-step method of analyzing the drinking water requirements of any work center, and an easy-to-use table for computing the payroll savings gained by using the G-E Work Center Plan for Water Cooler Placement.

Lynch Opens Offices In 2 New Districts

ANDERSON, Ind.—Lynch Corp. has announced the opening of a southern district office in Atlanta and a midwestern district office in Chicago.

The southern district is under the management of B. J. Scholl, who has served as district manager for Lynch's Par Div. for several years. He is assisted by R. W. Graff, sales and service engineer.

B. D. Berk, formerly midwestern sales manager for Par Div., has been named manager of the midwestern district. F. G. ("Hap") Lenhart, a sales and service engineer, is assisting Berk.

The southern district office is located at 1036 Peachtree St., Atlanta, and the midwestern office at Suite 428, 506 S. Wabash Ave., Chicago.

The company said a stock of emergency repair parts for Lynch packaging machines will be maintained by both offices, and that Atlanta warehouse facilities have been established for stocking a complete line of Par air compressors.

Opening of the new offices involves no change in Lynch's method of handling its refrigeration business, a company spokesman said.

2 Firms Rent Buffalo Stores

BUFFALO—Two concerns have rented stores here for the sales of electrical appliances. Arrow Hart & Hegeman Co.'s store is at 20 Carlton St. and that of Grupp Bros. at 1233 Kenmore Ave.

Magnified Thermometer Can Be Read from 6 Ft.

PITTSBURGH—A magnifier which simplifies thermometer reading has been developed by the Fisher Scientific Co. here.



Equipped with a pair of spring clamps, it is easily snapped onto any standard thermometer. It can be moved up or down to any desired position to magnify a full 2-in. section of the thermometer.

Instead of peering closely at the thermometer, the operator can now take an accurate reading from as far as 6 ft. away, and from a surprisingly wide angle from directly in front of the scale.

A hairline, engraved across the center of the magnifier, can be set at the desired temperature to serve as a handy reference point.

The new Fisher thermometer magnifier, made of polished plastic, costs \$2.25 each or \$24 in lots of a dozen.

Blackstone Names Distributor In Salt Lake City Area

JAMESTOWN, N. Y.—Blackstone Corp. has announced the appointment of Kimball Distributing Co., Salt Lake City to distribute its products in and around that city. The new distributor replaces Western Gas Appliances, Inc.

Dumser Replaces Potter As Wolverine Sales Head

DETROIT—H. Y. Bassett, vice president and general manager of Wolverine Tube Div., Calumet & Hecla Consolidated Copper Co., announced the appointment of John M. Dumser as director of sales.



Dumser replaces George D. Potter, who has resigned to devote his full time to the operation and sales program of Corey Steel Co. of Chicago, of which he is a vice president.

Coming to Wolverine in October, 1951, Dumser has held the position of general sales manager. Previously he has had many years experience in the field of sales of copper and brass fabricated products. In his new position Dumser will direct the sales program for the entire Wolverine Tube Div.

L & H Picks Memphis Outlet

MEMPHIS—W. L. Roberts, Inc. has been appointed by A. J. Lindemann & Hoverson Co. as exclusive wholesale distributor for the "Lectro-Heat" line of major appliances, it was announced here.

JUST ASK US!

Turn to "What's New" Page for useful information on new products.

"Experience has shown me the dependable long life of G-E Condensing Units."

Charles L. Walling

President, National Refrigeration Co.
4106 West Jefferson Blvd., Los Angeles, Cal.



THE FOOD GIANT, in Lynwood just outside Los Angeles, is one of the newest and largest of California's super-colossal markets—64,000 sq. ft. floor area, 18 check-out stands, 1,000-car parking lot. 28 G-E Condensing Units, all installed by Mr. Walling's company, serve 400 feet of self-service meat cases, refrigerated vegetable cases, frozen food cases, delicatessen cases and milk boxes.



National Refrigeration Co. specializes in super market installations and has done a major share of this business in Los Angeles. Mr. Walling says, "Super markets have become exacting, efficient businesses and require economy in every phase of their operations. I use G-E units because of the unquestioned integrity of the manufacturer and the wide acceptance of product earned by equipment performance over a long period of years."

You can put your confidence in—

GENERAL ELECTRIC



CONDENSING UNITS

EASY TO BUY!
EASY TO SELL!
EASY TO INSTALL!

FREE DATA ON G-E SEALED AND OPEN UNITS

General Electric Company, Section AC-6
Air Conditioning Division, Bloomfield, N. J.

Tell me the location of the G-E Parts Depot nearest me ☐

Please send me literature on G-E Open Units ☐

G-E Hermetics ☐ G-E Renewal Parts ☐

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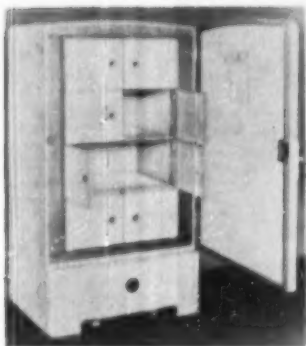
CITY

ZONE STATE

What's New

When requesting further information on new products, please use "Information Center" form.

Ryan Upright Freezer Features Electronic Alarm



KEY NO. B-320

HOPKINS, Minn. A new, highly-sensitive electronic warning alarm and signal light that guards against food spoilage in case of temperature rise is incorporated in the new upright Ryan "Freeze Pantry" now in production by the Refrigeration Div. of Ryan Industries here.

The 19-cu. ft. freezer stores 665 lbs. of food, yet occupies only 1,134 sq. in.—less than one sq. yd. of floor space, the company emphasized. Fin-

ish is white Dulux baked on rust-resisting steel.

A convenient, perpetual food inventory is built into the inside of the outer door.

Each of the four freezing-storage compartments has two inner doors for easy access, and to retain cold when the outer door is opened. Adjustable temperature control is provided.

A built-in heat wire is said to greatly reduce the possibility of condensation on the cabinet breaker strip.

The freezer is powered by a 1/2-hp. hermetically-sealed Tecumseh condensing unit. Other features are copper tubing throughout, "Freon-22" refrigerant, aluminum liner, individually refrigerated shelves dividing the interior into four compartments and fiber glass insulation.

The shockproof-mounted unit is of the "pull out" type for easy service. The freezer plugs into any 110-volt a.c. outlet.

A. H. Rose, president and general manager of the Refrigeration Div., said the upright is backed with a five-year warranty on the compressor body, and a one-year warranty on the cabinet, and warranty against food spoilage.

36-In. Electric Range Offers Deluxe Features



KEY NO. B-521

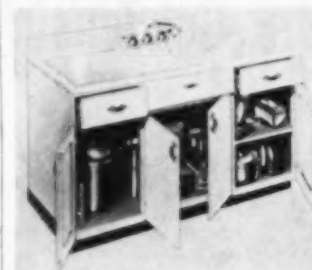
CLEVELAND—A deluxe model in a medium-size electric range is now being made available to the trade by Perfection Stove Co. here.

This 36-in. range, called model L302, has all of the styling and plus features found in 40-in. ranges, but has been designed with space limitations in mind, the manufacturer said.

A divided-top range with generous serving area in the center, model L302 has four fast-heating "Chromalox" surface units which offer a wide selection of cooking speeds. Surface units have capacities from 1,250 to 2,100 watts, with one a 6-in. 1,600-watt "High Power" unit. There's a multi-use deep-well cooker with an auto-lift heat unit for extra surface cooking.

The banquet-size oven is fully automatic and the smokeless broiler has been placed at a height found most convenient for homemakers. The oven is lined with a satin-black porcelain finish, and provided with non-tilt oven racks with safety stops.

Youngstown Sells Cabinet Sink for \$99.95



KEY NO. B-522

WARREN, Ohio—Mullins Mfg. Corp. announced that a 54-in. cabinet sink is now being sold by Youngstown Kitchens dealers for a limited time for \$99.95.

The sink is a full-sized unit. It has a porcelain enameled top and standard faucet assembly and an under-sink cabinet with two drawers and three storage compartments, one with a shelf. Doors and drawers are sound insulated.



Fiberglass Insulation Cuts Condensation on Ducts

KEY NO. B-523

TOLEDO—Development of Fiberglass vapor-seal duct insulation, designed to prevent condensation on air conditioning ducts which carry cool air in warm, humid areas, has been announced by Owens-Corning Fiberglass Corp.

The new type material stops condensation by enclosing the duct in thermal insulation having a built-in vapor barrier of asphalt and kraft paper, according to the company.

Use of the insulation helps lower costs, the company said, because:

1. The material may be applied in a single operation, thus lowering labor costs during application. Separate application of a vapor barrier is unnecessary.

2. Material has "exceptional efficiency." As a result, less Fiberglass insulation is needed.

Fiberglass vapor-seal duct insulation consists of fine fibers of glass, bonded together by a stable resin into a rigid, rectangular insulating board with clean-cut edges, the company explained. One surface and both ends are covered with asphalt and kraft paper, forming an integral barrier.

The material is furnished in 24 by 48-in. panels and in thicknesses of 1/4, 1/2, 1, and 2 in. It may be cut easily and accurately to any shape.

The material may be applied to ducts by the same conventional methods used for application of semi-rigid insulation. If screw-and-cap or metal clip methods are used, the vapor barrier is punctured, and sealing of the resulting holes then is necessary. All holes in the vapor barrier must be sealed with a cut-back asphalt mastic. If this is not done properly, the vapor barrier's effectiveness is reduced.

For exposed ducts, a decorative finish is desirable. To prevent asphalt from bleeding through and staining finishes, it is recommended that metal lath and corner beading be attached to the insulation and a plaster finish applied. The plaster can be painted.

The insulation also may be painted with an asphalt-base aluminum paint and, if more finish is desired, with lead-base or oil-base paint. It also may be covered with canvas, then painted.

For sealing joints in vapor-seal insulation after application, it is recommended that a heavy trowel coat of a vapor barrier mastic be worked into the joint and carried out 2 in. on either side to provide the vapor bar-

rier. Strips of open mesh glass cloth or tape, 3 to 4 in. wide, can be embedded in the asphalt to reinforce joints and prevent parting.

The new-type insulation is lightweight and, as a result, does not add excessive weight to the duct system, it was noted. A 1-in. thickness of the material weighs about a half lb. per sq. ft. and is "easy to handle."

Owens-Corning engineers point out that if the insulation is used where it is exposed to weather or abuse, it must be protected by a covering of canvas and paint, sheet metal, or roofing felt.



through these

new cost-cutting developments

atomized air—Eliminates waste. Gentle circulation of moisture-conditioned refrigerated air around the merchandise in the display well, without dehydrating blast, guards the appearance and freshness that wins sales and produces fast turnover.

directional flow—Eliminates costly spillage. Controls and confines flow of atomized air to display well. There is no loss of refrigerated air out of the case into the store area—no costly spillage to cause constant overtime work for the condensing unit.

re-circulated air—Saves more than 15% running time. After air moves across the display well it is drawn back to the refrigeration coil, where only a slight lowering of the temperature is required, so that it can be used over and over again. This saves as much as 15% running time and permits the greater economy of a smaller, less costly condensing unit.

SHERER users have saved as much as \$210.00 a year per 10' display

plus: Sherer's famous "Automatic Selling" features of design such as "wide angle visibility" and giant "panoramic" display wells that will increase the volume of unplanned sales... Sherer Distributors sell more because they have more to sell.



SHERER-GILLET CO., marshall, michigan

MORE Service—LESS Servicing!



Model 1-131-A20

SWEDEN SPEED FREEZERS

the
FOUNTAIN
FREEZER

With SWEDEN-

TODAY—after more than 17 years' leadership in the ice cream freezing and dispensing field—SWEDEN Speed Fountain Freezers are still "years ahead," giving owners consistent, trouble-free service.

It's an old story—of advanced design and superior engineering, of pioneer testing and development. Automatic freezing controls for simple operation; sturdy construction and accessibility of all parts for quick cleaning are standard SWEDEN features that add up to MORE and LONGER service... LESS upkeep expense.

Dispensing Soft Ice Cream, Frozen Custard and other long-profit specialties with amazing speed, SWEDEN eliminates bulk shrinkage, requires less cream weight-per-serving. Dipping, handling and scraping are eliminated; both food and labor costs slashed 50% and more.

And remember—the SWEDEN line is really complete. There's a model to meet every need, every budget. SWEDEN's model variety adapts the machine to the operation, not vice-versa. SWEDEN Speed Fountain Freezers are profitable to own and operate... investments that pay for themselves out of EXTRA profits!

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Sizes To Bend 1/4" O.D. to 1 1/2" O.D.

NO KINKS OR FLATS

PORTABLE

AT LEADING SUPPLY HOUSES

HOLSCLOW BROS., INC.

What's New (Cont.)

Barkow 20-Cu. Ft. Freezer Has 3 Shelves, Deep Well



KEY NO. B-524

MILWAUKEE—August G. Barkow Mfg. Co. here has announced introduction of a new 20-cu. ft. Barkow "Cold Shelf" vertical freezer.

Top model of the present line of vertical units, the freezer is being produced in the recently expanded, modern Barkow plant.

The new model will store up to 700 lbs. of food. It features three fast-freezing, eye-level shelves, a deep well for large items, and an "easy-to-open" door.

Basic construction is made up of 20-gauge steel on the exterior and 22-gauge aluminum on the interior. The freezer is powered by a hermetically-sealed, 2-cylinder, 110-volt a.c. condensing unit. All hardware is chrome-plated, including the convenient frost-breaking lock.

The refrigeration and bottle cooler division of Barkow was developed in 1945 as part of the former Ben Bar Sales Co. In 1947, August Barkow bought out the interests of T. H. Bentley and formed the present firm. In 1951 the brand name for the cold storage units was changed from Ben Bar to the Barkow Cold Shelf.



New Instrument Enables Time-Temperature Control

KEY NO. B-525

PHILADELPHIA—An electronically operated circular chart controller which can control industrial processes according to time-temperature schedules has been developed by Minneapolis-Honeywell Regulator Co.

In instances where both time and temperature control are important for product quality and efficiency of operation, the new instrument—developed by Honeywell's Brown Instruments Div.—has an integral-program cam mechanism which automatically positions the instrument control point in accordance with a predetermined program.

This instrument combines within a single case, measurement and recording on a 12-in. chart; automatic positioning of the set point index as directed by a transparent program cam; and automatic program control of the variable.

The combination of these functions in a single instrument has resulted in economy not previously available when it has been necessary to use another instrument or device separate from the controller, according to the company.

The standard Brown "continuous balance" system is used for measurement. It is available in both electric and pneumatic control.

An adjustable "micro switch" assembly, operated by the cam, is optionally available. The switch as-

sembly is used to de-energize the cam drive motor, shut down equipment, operate signal lights, or perform other electrical functions at the user's option.

Ideal Tester Determines Continuity of Circuits

KEY NO. B-526

SYCAMORE, Ill.—A new pocket-size continuity tester is being added to the line of electricians' tools manufactured by Ideal Industries, Inc. here.

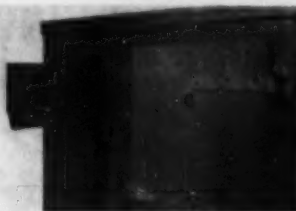


The continuity tester is designed to determine continuity of circuits and identify wires between terminals or in multi-wire cable, as in switchboards and control panels.

It permits testing of circuits without the need of live wire connections, as it provides its own power from penlite batteries. The Ideal tester may be used in noisy areas, because it uses a signal light indicator which illuminates the point of contact. It requires only one hand, leaving the other hand free to hold circuit diagrams or blueprints.

No larger than a pen-lite flashlight, the Ideal continuity testers come equipped with a 4-ft. cord and alligator clip. When not in use the test lead is detached eliminating any chance of exhausting the batteries.

'Chill' Walk-In Cooler Unit Can Be Set Up In 2 Hrs.



KEY NO. B-527

MINNEAPOLIS—Midwest Mfg. Co. has developed a new "Chill" walk-in cooler unit, including cooling mechanism, which it says may be installed and placed in operation in two hours time.

Assembly requires only two men, a hammer, saw, and wrench.

This ready-to-use unit employs the same construction features traditional in Chill custom-built coolers. Panels have "Lockseam" joints that remain tight through expansion or contraction. Framing is constructed of kiln-dried No. 1 Douglas fir and sheathed with top grade Douglas fir.

Insulation is 3½ in. pre-formed semi-rigid fiber glass batts sealed with heavy vapor insulating felt. Pre-fitted sections arrive with the door already fastened in place on ball-bearing hinges. The cooler is finished, inside and out, with clear glass lacquer.

The self-contained Chill cooling system fits into the front wall of the cooler, and plugs into any standard electrical outlet. It is factory sealed and unconditionally guaranteed for one year, with immediate factory replacement if defective. An expansion

valve regulates the cooling automatically, and the coil and compressor sizes are designed to be self-defrosting.

The new package was designed for easy installation, and provides walk-in refrigeration for meats, dairy products, beverages, produce, and other perishables.

Model K-6 is 6 ft. by 6 ft. by 6 ft. 6 in. with a ½-hp. compressor. Model K-8 is 6 ft. by 8 ft. by 6 ft. 6 in. with a ¾-hp. compressor.

Special Tee Fitting Vents Fin-Tube Baseboards

KEY NO. B-528

PROVIDENCE, R. I.—A cast iron reducing fitting intended to overcome fin-tube baseboard venting and space limitation problems has been introduced by the General Fittings Co. here.



Called the General Special Tee, the return end fitting has a tapped air vent opening that eliminates the need for bushing, drilling, or tapping standard fittings. The supply end fitting has a tapped-off riser opening allows sufficient room above the finished floor line for positive radiator valve shut-off at each unit.

Special Tees are available for use with 1½ and 1-in. fin-tube baseboards and for both ½ and ¾-in. riser connections.

Information Center

For more information on What's New products, current literature and catalogs available, equipment advertised in AIR CONDITIONING & REFRIGERATION NEWS use Key Numbers where designated or specify products advertised and we'll see that you receive this information promptly.

What's New or Current Literature Available

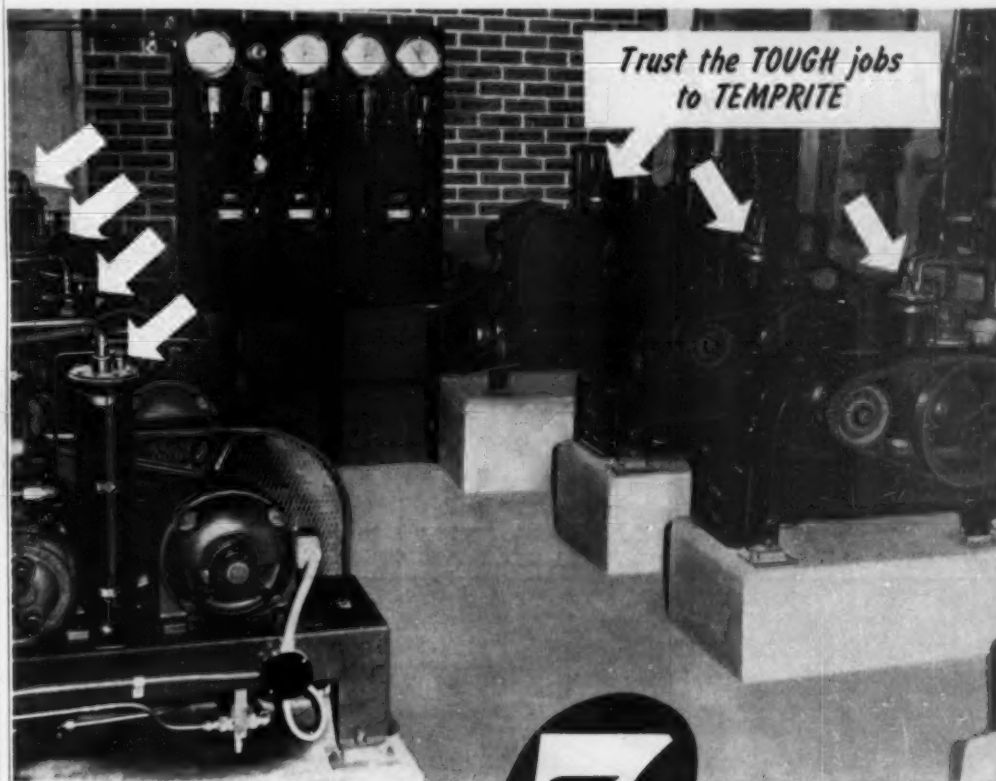
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Key No. Key No.

Products Advertised (list name, page, and issue date)

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City Zone State
Type of Business

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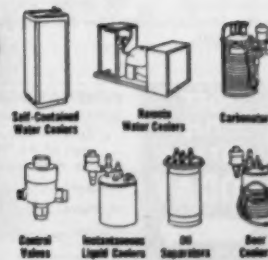


Trust the TOUGH jobs
to TEMPRITE

Temprite Separators

help keep giant system
at peak cooling efficiency!

Seven condensing units installed in one of America's largest state universities are protected with an equal number of Temprite Oil Separators. Oil is automatically returned to the compressor before it can get into the evaporator or condenser walls. Like many another efficient installation, this Temprite-protected system thereby effects maximum heat transfer at all times, valves operate accurately, power consumption is held to a minimum, and service call-backs are almost unheard of.



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Birmingham, Michigan

☐ Send name of your local distributor.
☐ Send me complete data on your oil separators

Name

Address Zone

City State

Government Contracts

DEPARTMENT OF DEFENSE

It is not necessary to refer solely to the issuing office for editions dated after a bid invitation issued by any of the following U.S. Army Ordnance Office Ordnance Tank Automotive Center Detroit Arsenal, Frankford Arsenal, Picatinny Arsenal; Aberdeen Proving Ground, Maryland; Watervliet Arsenal; Watertown Arsenal and Waterville Arsenal. Complete information on all purchases listed by any of those offices alone can be obtained from the Ordnance District Office nearest you. Its address is located at the end of each listing under "Responsible Office." Do not ask an Ordnance District Office for information on a purchase unless it is listed by one of the above-named Ordnance District Offices or its name appears in boldface type.

OTHER PURCHASES

Invitations for bids numbers will be followed by the letter "B." Requests for proposals or quotations will be indicated in this column by the letter "Q," or if numbered, the number will be followed by the letter "Q."

Description	Quantity	Invitation No.	Opening Date
Gulfsouth District Corps Of Engineers, 600 Santa Fe Building, Galveston, Texas			
Contract for refrigerated warehouse w/ floors of reinforced concrete wood frame w/ walls and built-up wood roof approx 1000 sq. ft. in area secure storage bldg. reinforced concrete masonry walls roof of light weight poured concrete over steel bare joists Lake Charles Aff. LA	Job	EAG-01-248-52-106B	17 Jun 52
AWNS, 22			

WVNV 226			
Yards and Dock Supply Office, Fortroseme, California, Aerial Fuel and Oil Division			
Refrigerator two door reach in type 32 cu ft capacity 110 volt AC 60 cycle single phase with 1/2 hp	151 ea	YDMA-1000- 53	12 May 52
Pan exhaust electric roof ventilator propeller type vertical discharge 100 CFM 220 volts AC 3 phase R 50 cycle	370 ea	YDH-1 1003-52	18 May 52
Naval Aviation Supply Depot, Philadelphia, Pennsylvania			
Refrigerators reach 1/2 door board type one door mill spec Mil R 1545B ships	330 ea	1-1054B	20 May 52
Refrigerators reach in ship- board type two door mill spec Mil R 1545B ships	100 ea	1-1054B	20 May 52
Commandant Of The Marine Corps, Washington, D. C.			
Attention Supply Department Procurement Section			
Spare parts for Servel refrig- erator 3 cubic foot kerosene burning model N-80 Servel or	8 ft.	1165B	26 May 52

Chicago Quartermaster Depot, Quartermaster Purchasing Div.,
Chicago, Illinois
Machine for crushing 100 ea

GENERAL SERVICES ADMINISTRATION

Description	Quantity	Invitation No.	Opening Date
Business Service Center, Region 3, General Services Administration, Seventh and D Streets, S.W., Washington 25, D.C.			
Air condition conference rm	Job	(C-B-153)	8-15-52
1728 "F" Street, N.W., Washington, D. C.		R-190	
Refrigerating machine, water cooler, storage tank, and cooling tower.	1 ea	4H-12118R	5-23-52
General Services Administration, Business Service Center, 375 U.S. Courthouse, Chicago 4, Illinois			
Electric water coolers	25 ea	CHD2012	5-19-52
Cabinets, low temperature electric.	14 ea	CHD1028	5-15-52
Business Service Center, Region 2, General Services Administration, 350 Hudson Street, New York 13, New York			
Air conditioning, etc	Job	None	5-21-52
Phila. Pa. Rittenhouse Sq. Bldg.			

**NATIONAL ADVISORY COMMITTEE
FOR AERONAUTICS**

National Advisory Committee For Aeronautics, Langley Field, Virginia	1 lot	15395	8-20-52
Services and materials for furnishing refrigerant gas dichlorodifluoromethane in standard 200 pound cylinders.			

CONTRACTS AWARDED THROUGH MAY 2

NAVY Department, District Public Works Office and Officer in Charge, 1000 Pennsylvania Avenue, N.E., Washington, D.C. 20540. Installation of air conditioning in fleet administration bldg. U.S. Naval Air Station Boca Chica Field, Key West, Fla.—29,667.

Giffen Industries Inc., 272 Aragon Ave., Coral Gables, Florida. **Public Works Office, Fifth Naval District, Norfolk 11, Virginia** air conditioning for buildings X-46 and X-47 and includes construction of new ductwork and installation of new equipment. sheet metal work, painting and incidental related work U.S. Naval Base, Norfolk, Virginia.—\$49,152.—Colonial Sales Corp., 3913-15 Colonial Ave., Norfolk, Virginia.

Alfred E. Smith and Sons, Inc., 1000 E. 12th St., Norfolk 11, Virginia. Demolition and related work for buildings X-46 and X-47, and includes earthwork, demolition, concrete and masonry construction steel and iron work, hardware, glazing and caulking, acoustical and asphalt tile work, field painting, roofing, sheet metal work, rebar, electrical work, field painting and incidental related work. U.S. Naval Base (CinCNavFleet Headquarters) Norfolk, Virginia.—\$19,513.—Lee S. Morris, Inc., 1370 6th Ave. New York, N.Y.

National Survey Shows

Many Independent Stores Plan To Triple Frozen Foods Volume During Next 5 Years

CHICAGO—Independent retail food stores plan to expand their frozen foods business up to three times their present volume in the next five years, according to a study just published by the National Association of Retail Grocers.

Results of the survey, conducted among independent retail grocers who are subscribers of *National Grocers Bulletin*, official publication of NARGUS, were released by Mrs. R. M. Kiefer, secretary-manager of the association and editor of the publication.

Returns from 859 retailers represented all sizes, kinds, and types of retail establishments from all over the United States, including returns from every state.

98.8% OF STORES SELL FROZEN FOODS NOW

Of all stores reporting 98.8% sold frozen foods. The report covers the sales of the fourth week in January, 1952. For the nine major classifications of frozen foods, stores reported sales as follows:

Frozen juices, sold by 93.7% of stores; frozen vegetables, 95.6%; frozen fruits, 94.2%; frozen fish, 93.9%; ice cream, 93.7%; frozen poultry, 88.3%; frozen meats, 58.3%; frozen pet foods, 49%; frozen baked goods, 43.6%.

Overall average space of frozen foods cases per store is 14.6 linear ft., although footage ran as high as 125 ft. in one store. Stores of over \$1 million volume average 43.5 ft. per store, and those under \$100,000 averaged 10.5 ft. per store.

From computable data, frozen foods account for 5.42% of dollar sales, with 62.5% of the stores exceeding 6%.

SURVEY ESTIMATES INCREASE

Estimating increases of frozen foods volume in the next five years, 53.9% of the retailers believe they will at least double their present volume, while 36.1% feel they will at least triple their present volume in five years.

Store ranging in annual dollar volume of over \$1 million (4.8% of returns) to under \$100,000 (11.4% of returns) participated in the survey.

Stores in volume classification of \$100,000 to \$150,000 accounted for 35.5% of returns; \$150,000 to \$250,000, 27% of returns; \$250,000 to \$500,000, 15.6%; \$500,000 to \$1 million, 5.8%.

More than 25% (25.7%) of the stores reported they had handled frozen foods for more than 10 years; 59.3% had handled frozen foods from three to nine years inclusive; and 15% had handled frozen foods for less than three years. Of the last group, most of the stores reporting were new stores.

Percentages of stores carrying at least six major frozen items are: stores with over \$1 million volume,

100%; \$500,000 to \$1 million volume, 100%; \$250,000 to \$500,000, 98.4%; \$150,000 to \$250,000, 92.4%; \$100,000 to \$150,000, 87.7%; under \$100,000, 82.4%.

Percentages of total dollar sales from frozen foods were computed for four volume classifications. Stores of \$100,000 to \$150,000 volume reported dollar sales from frozen foods at 6.97%; stores of \$150,000 to \$250,000, 6.42% of dollar sales; \$250,000 to \$500,000 volume, 5.12% of dollar sales; and \$500,000 to \$1 million, 5.8%.

Percentages were not computable from available data on stores of over \$1 million volume and under \$100,000 volume.

MOST STORES USE NO MORE THAN 2 TYPES OF SUPPLIER.

Survey of buying practices revealed that over 95% of the retailers rely on no more than two types of suppliers for their frozen foods, with 70.7% buying all requirements from one type of supplier, and 24.4% using two types of suppliers.

The breakdown of those using only one type of supplier shows: 40.1% buy all requirements from frozen food distributors; 29.4% from regular wholesalers; 0.7% from processors and 0.5% from brokers.

Of retailers surveyed, 5.5% have lockers, averaging 374 lockers each. Of members who have lockers, 93.5% also have frozen food display cases, averaging 15.4 linear ft. of frozen food display case. All locker operators carried at least four lines of frozen foods.

Complete figures of the survey may be obtained by writing Mrs. R. M. Kiefer, 360 No. Michigan Ave., Chicago 1, Ill.

'Ultralite' Maker Extends Western Fiberglass Area

KANSAS CITY, Mo.—Gustin-Bacon Mfg. Co. here, producer of "Ultra-lite" glass fiber insulation, has extended the distributing territory of Western Fiberglas Supply Co. of San Francisco to include the entire Pacific coast and Alaska.

Western Fiberglass Supply previously had been distributor for Ultralite in the Los Angeles and San Francisco areas. The firm has already opened new offices in Seattle, and will soon add branch offices in Spokane, Portland, and Alaska.

Ultralite is used as both thermal and acoustical insulation in refrigerated trucks and air conditioning units, among other applications.

JUST ASK US

For "easy-to-get"
product information . . .
use coupon on "What's
New" page.

WHO SOLD THE REFRIGERATION?

A gripping tale of suspense and profits... as told by

METE R. MATIC

ON ONE HAND —



I was no different than other dealers. I, too, had refrigeration units on hand that had to be sold.

ON THE OTHER HAND —



Prospects told us: "We need new refrigeration, but how can we buy it?"



"We can't afford it. We pay for our supplies daily."

"At the end of the month there is not enough left to make lump sum monthly payments."

THEN . . . ONE DAY IT HAPPENED —



Mr. M. T. Pockets considered to be the toughest of all to sell . . . finally bought the unit he needed. Dealers all over town asked: "Who sold Mr. T. Pockets — and HOW?"



I had to confess. I did it, and here's how. I found out about the Meter-Matic Sales Plan and explained it to Mr. M. T. Pockets. He realized that he could afford to buy on this simple plan.



There are no lump sum monthly payments. All he has to do is drop a few quarters a day into the meter . . . and I am assured of getting my money each month.



Installation of the Meter-Matic coin meter was very simple. It took just a few minutes to hook-up the meter.

AND NOW . . .



Mr. M. T. Pockets and I are good friends. He wants to buy another unit next month. All I'll have to do is make a quick change of meter timing gears, increasing the daily payment to include the new unit.



Model DM-6 Double Door

The moral of the story is:

If you want to sell more refrigeration, sell on the

METER-MATIC®

SALES PLAN

Customer deposits quarters daily. If he doesn't . . . the meter will stop the flow of current to his refrigeration unit.



New Mr. Mate R. Matic hits the jackpot every month.

METER-MATIC METERS ARE —

- Accurate and Dependable.
- Low in Price.
- Fully Guaranteed.

GET THE DETAILS TODAY



INTERNATIONAL REGISTER COMPANY
 2626 West Washington Boulevard, Chicago 12, Illinois

Send me Meter-Matic Sales Kit No. 52-R. Be sure to include a copy of the "1952 Survey" giving vital statistics on the use of the meter plan by other dealers.

Company _____
 My Name _____
 Address _____
 City _____ Zone _____ State _____

(His business paper
... of course)

This business paper in your hand has a plus for you, because it's a member of the Associated Business Publications. It's a *good* circulation paper that must *earn* its readership by its quality. And it's one of a leadership group of business papers that work together to add new values, new usefulness, to make the time you give to your business paper *profitable* time.

To shoot par in business today, you've got to follow through on your business reading. That's why the **Best Informed Men in your Field** really read their business paper—cover to cover.

With the going made rough by tough competition, changing regulations and swift improvements, there's no other place where you can get so much on-the-job help for so little . . . with editors sifting and interpreting the facts . . . advertisers reporting on new products, methods and materials. Read every issue—thoroughly. It will keep you one of the **Best Informed Men in your Field**.

AIR CONDITIONING & REFRIGERATION NEWS

One of a series of advertisements prepared by THE ASSOCIATED BUSINESS PUBLICATIONS

BASIC REFRIGERATION CONTROLS

By Service Information Division,
White-Rodgers Electric Co.

7—How To Use Electrical Ratings of Controls

Electrical ratings are always a good topic for discussion. The accompanying tables indicate the various electrical ratings of controls built by White-Rodgers. In the majority of cases you will use controls which carry "FG" ratings.

The controls carrying the "HH" ratings have single-pole double-throw switching mechanisms.

The controls carrying the "GVL" rating are designed for use in thermocouple circuits. Thermocouple or self-generating type controls are rarely used in the refrigeration industry. We do find these types of controls used to some extent in heating.

Note the high electrical rating of "FG" controls. On alternating current, and at full load motor current rating these controls will carry 13 amperes at 115 volts or 6.5 amperes with 230 volts. The locked rotor motor current rating of the controls is 78 amperes at 115 volts and 39 amperes with 230 volts.

The direct current motor rating of the controls, full load current is 4.6 amperes at 115 volts or 2.3 amperes with 230 volts. The lock rotor current rating is 46 amperes at 115 volts or 23 amperes at 230 volts.

You may at times want to use these controls to operate electrical strip heaters. The electrical heater rating on these controls, on alternating current, is 25 amperes at 115 volts or 20 amperes at 230 volts. Direct current rating: 20 amperes at 115 or 10 amperes at 230 volts.

Because of the wide variation in types of motors used, it has been necessary for the control industry to abandon the old horsepower rating on controls. The new control method is described in the White-Rodgers catalog as follows: The rating of the controls selected must not be less

than the full load current and not less than the locked rotor current rating of the motor to be used.

For field replacements the following approximations of the old horsepower rating may be used:

Controls having "FG" rating can be used with motors up to 1 hp. a.c. and for ½ hp. d.c.

Controls having "HH" rating can be used with motors up to ½ hp. alternating current. They do not have an assigned current rating.

Controls having the "GVL" rating should not be used with electrical motors.

It is possible that you may want to hook more than one motor on a single control. Any number of motors may be operated from one control, provided the control rating is not less than either the sum of the full load or the sum of the locked rotor current of the motors.

Controls having "FG" switching mechanisms may be used with two-circuit hook-ups. They can carry the same motor load as shown for "FG" rated controls and also a pilot duty load not in excess of 125 volt amperes.

White-Rodgers controls carrying the "FG" rating are one of the highest rated controls obtainable. We feel that no service organization would purposely overload any control. However, we do want to call attention to the fact that electric motors vary greatly in design. All types of electric motors do not draw the same amount of current when the motor is being started. The motors in the refrigeration industry are known as high starting torque motors.

The electrical rating of each control that we build is shown on a label placed on the inside of the control case cover. The ratings are also shown in product catalogs.

'FG' CONTROL RATING

A.C. Motor Rating	115 v.	230 v.
Full load current.....	13.0 a.	6.5 a.
Locked rotor current....	78.0 a.	39.0 a.

D.C. Motor Rating		
Full load current.....	4.6 a.	2.3 a.
Locked rotor current....	46.0 a.	23.0 a.

'HH' CONTROL RATING

(S.P.D.T. Controls)		
A.C. Motor Rating	115 v.	230 v.
Full load current.....	7.4 a.	3.7 a.
Locked rotor current....	44.5 a.	22.2 a.

'GVL' CONTROL RATING

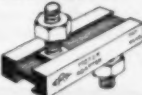
(Thermocouple Controls)		
Volts		Amperes
0.3 to 12 d.c.....		2
12 to 50 a.c.....		2
125 volt-amperes, 115 to 230 v. d.c.		

(To Be Continued)

PARTS JOBBERS

Have you any one item that sells a host of other units? If you can answer YES, then we know you are handling Motor Adapters; and we know also, they are selling motors, belts, pulleys, controls and other allied items for you.

Engineering Research Associates Inc.
3475 East Nine Mile Road
Hazel Park 7, Michigan



¼ to ½ hp.—101-D
½ to 1 hp.—102-C
1 to 3 hp.—103-C

Where Quality Counts Most—its KEROTEST



GET EXTRA CAPACITY
at NO EXTRA COST!

Get the
KEROTEST
DRI-ZIT
Dryer

See your
Kerotest Wholesaler
FIRST

Check these

EXTRA VALUE FEATURES!

- ✓ Extra absorption capacity with no increase in size or cost.
- ✓ Protects system with three graduated screens on outlet side.
- ✓ Special dispersion plate and 120 mesh screen on inlet assures maximum drying action.
- ✓ Hydrogen brazed, all-steel bodies, tested to 3000 pound gauge.
- ✓ Approved by the Underwriters' Laboratories.

KEROTEST

KEROTEST MANUFACTURING COMPANY
Pittsburgh 22, Pa.

5-Day Gibson School Provides Opportunity For Servicemen To Practice What They Learn

BELDING, Mich.—For five straight days recently, servicemen from various parts of the nation sat down in a practical classroom at Belding, Mich., to take long looks at the newest developments in Gibson electric ranges, refrigerators, and home freezers, to hear down-to-earth talks by experts on an assortment of subjects, and, of prime importance, to practice what they had learned.

A postwar project for Gibson Refrigerator Co., the service schools—the parent one at Belding and a great many others held in the field—are part of an over-all service training program.

Since 1948, servicemen have attended 56 factory service schools. During the same period similar schools have operated under joint company and distributor sponsorship in the field in every state. In all schools, Gibson has set up a curriculum that bears hard on the practical applications of knowledge.

Classes are kept small. "It's more informal and they learn more," is the explanation given by Benjamin M. King, Gibson's national service manager.

Example of how the factory school works at Belding, home of Gibson's manufacturing divisions, is pointed up by the January class. From the first day when they register and hear Robert W. Rivett explain basic fundamental principals to the last day when diplomas are awarded, the men are busy from 8 a.m. until 5 p.m.

Using ingenious training aids—il-

lustrated charts, a display board that shows in a glance how Gibson refrigerators operate, and other teaching tools—members of the Gibson service department give the men just what the came to learn: "how to do a better job of servicing."

Following an elaborate outline of subjects and methods, Gibson instructors give students just about everything they need to do the right kind of jobs back in their own stamping grounds.

In one session, for example, instructors tear down and build up models of Gibson ranges and refrigerators. After a full day of watching, asking questions, and study, the group goes into a night session to do the job themselves.

Gibson service experts "rig" the models with purposely mis-wired relays, plugged capillary tubes, and the like. The students then swarm into action to diagnose and remedy.

In addition to technical aspects, the class gets a full view of stock control, sales, and manufacturing. And again the emphasis is on the practical side. Classes tour the Gibson manufacturing units to see first hand how products are made. They see the raw materials, assembly, and finished models.

Under the subject of sales, students are trained in the fine selling points of the products they service.

Applications for the factory schools are sent in by distributors and dealers.

To help insure "quality" right

down the line, students are even taught the correct methods of unpacking Gibson products.

By week's end, with some 40 hours of practical instruction behind them, the students wind up the session with a tour of Gibson plants and sit down to a graduation banquet.

In addition to a diploma and authorized service card, each person gets a thick service manual filled with complete-to-the-minute round-up covering everything needed to do a good servicing job. The book includes charts, tables, illustrations, and complete descriptions of every product part.

Gibson is now planning to enlarge the over-all training program.

Patterson Heads Buffalo Branch of American Brass

WATERBURY, Conn.—Scott H. Patterson has been appointed branch manager of The American Brass Co.'s Buffalo, N. Y. plant, according to John A. Coe, president. Since 1980 Patterson has been New York City district sales manager.

Patterson joined the Buffalo branch of American Brass in 1927. He was transferred to the company's Pittsburgh office in 1935, and appointed district sales manager there in 1939. Patterson will return to Buffalo on May 1 to take over the duties of Justice Lockwood, who was recently appointed vice president in charge of sales for the entire company.

NEW PRODUCTS?

Turn to "What's New" Page for Useful information on new products. Use Key No. for fastest service.

YOU CAN MAKE
MORE INSTALLATIONS—
MORE MONEY
WITH

Curtis
REFRIGERATION
and AIR CONDITIONING
EQUIPMENT

The broad Curtis line—¼ through 40 tons—enables Curtis Distributors to handle the most profitable air conditioning and refrigeration jobs in their areas. And because Curtis equipment reflects the many advantages gained from almost a century of accumulated experience in engineering, designing and manufacturing, you can depend upon customer satisfaction.

Curtis Air Conditioning is advertised in the Saturday Evening Post, Time, Newsweek, and other national publications.

Mail coupon for details concerning a direct factory franchise.

98 Years of Successful Manufacturing Experience is "Built-In" Curtis Equipment

Curtis
REFRIGERATING MACHINE DIVISION
of Curtis Manufacturing Company
1912 Kienlen Avenue
St. Louis 20, Missouri



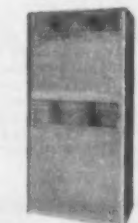
Water-cooled
Condensing Units
—through 40 tons



Evaporative Condensers,
Cooling Towers and Air
Handling Units to match



Central Type
Air Conditioning
—10-15 ton



Package Type
Air Conditioning
—2-4-6-8 ton

Curtis Refrigerating Machine Division
of Curtis Manufacturing Company
1912 Kienlen Avenue • St. Louis 20, Missouri
I am interested in direct factory franchise. Send complete details.

Company Name _____
Street _____
City _____ Zone _____ State _____
Signed _____



Absorption Machine

Where Lots of Chilled Water Is Needed and Low Price Heat Is Available, System May Have Certain Advantages

WASHINGTON, D. C. — "Where chilled water is required for air conditioning or industrial processing and low price heat is available, the absorption machine has many advantages," L. B. Mighell, Washington branch manager for Carrier Corp., declared at the Refrigeration and Air Conditioning Engineers' Technical Conference held at Bolling Air Force Base here by Headquarters, United States Air Force.

"The absorption unit requires little space and weighs less per ton than reciprocating or centrifugal machines," Mighell said, "and because it has no major moving parts other than a small solution moving pump, it practically eliminates vibration problems."

"These factors make it possible to locate the unit on upper floors usually without the need for expensive foundations or structural reinforcing. This is especially important in old buildings."

"The absorption machine is avail-

able in five sizes—115, 150, 200, 270, and 350-ton machines, and these are designed for use with steam at 12 p.s.i.g. or 45 p.s.i.g. pressure," he explained.

"In some industrial applications it may be possible to use hot liquids other than steam if such are available. Steam consumption, moreover, runs less than 20 lbs. per hour per ton of refrigeration."

In discussing the operation of the absorption machine, Mighell explained that it has six major component parts: the cooler (evaporator), absorber, heat exchanger, generator, condenser, and eductor, and that it uses water as the refrigerant and a lithium bromide solution as the absorbent.

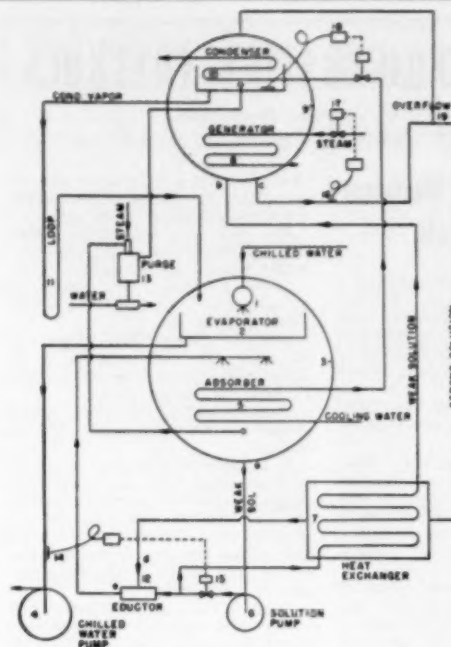
The lower shell contains the cooler and absorber. Chilled water as it returns from the cooling load on the machine is sprayed into the evaporator. Because this shell is maintained at a low absolute pressure, some of the chilled water flashes or vaporizes

and cools the remaining water to a temperature which closely corresponds to the shell pressure.

Absorber tubes occupy the bottom portion of the lower shell. Here a concentrated solution strong in salt, which has the power to absorb the water vapor is sprayed over the tubes and absorbs the vapor flashed in the cooler.

The absorption and concentration of water vapor in the solution reduces its salt concentration, thus reducing its absorbing power. Weakened solution is continuously drained from the absorber and pumped to the generator in the upper shell to be concentrated.

"Since the weak solution going to the generator is relatively cold and should be preheated, and the strong solution leaving the generator is hot and should be cooled down to increase its absorbing power, these two solutions pass through a heat exchanger. The heat exchanger saves both steam and condensing water.



PIPING diagram shows chief components of Carrier absorption chilled water machine for large installations.

specify for an unbeatable combination

Acme can furnish the unbeatable combination for industrial liquid chilling. When you specify an Acme Dry-Ex liquid chiller, heat exchanger, or oil separator, you'll get a flexible combination with many years of low cost, trouble free service.

ACME CONDENSERS

Offered in Shell and Coil and Shell and Tube designs, the ACME line of condensers is very complete—more than 120 standard sizes are offered for use with Freon, plus seven sizes in Model SC Shell and Finned Coil, with twelve additional sizes in Model J Shell and Tube Condensers. Both are designed for Freon 12 or Freon 22 Refrigerant. ACME Condensers are inexpensive, have drainable coils, are easy to clean and are compact, sturdily built and extremely efficient.

ACME HEAT EXCHANGERS

A new, more compact design that features low suction pressure loss and saves you valuable space. You get maximum gain from each degree of superheat. This new heat exchanger comes in eleven models with capacities from 3 to 200 tons, has a 15 to 1 ratio of gas side to liquid side surface, and gives you complete heat transfer and pressure drop data to permit the most economical selection for any system, at any temperature level.

ACME OIL SEPARATORS

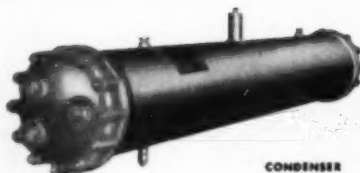
Are offered in a complete range of sizes, are economical and efficient to operate, easy to install and offer positive oil separation. Offered in a complete range of sizes, they are scientifically engineered for use with Ammonia or Freon. Series F Units have a central mounting strap and may be mounted directly on the Compressor base. Series FK and AK Models have a support bracket welded to the top.

ACME DRY-EX® WATER COOLERS

Designed to meet an extensive variety of either commercial or industrial applications, ACME DRY-EX Water Coolers are offered in more than 700 combinations of refrigerant heads, baffle spacings and tube lengths. ACME Straight through tube construction permits the refrigerant circuit to be increased twice as frequently as in the "U tube" design. Baffles have a tighter fit with the shell and with the tube, and straight through tubes can easily and economically be replaced in the field.

ACME ALSO MANUFACTURES: Freon Condensers—Ammonia Condensers—Rite-Cold® Industrial Unit Coolers—Evaporative Condensers—Liquid Receivers—Pipe Coils—Shell and Tube Condensers—Shell and Coil Condensers—Heat Exchangers—Flow-Cold® Liquid Chillers.

Acme



CONDENSER



HEAT EXCHANGER



OIL SEPARATOR



WATER COOLER



*Trade Mark

Acme

INDUSTRIES, INC., JACKSON, MICHIGAN, U.S.A.
CONTINUOUSLY SERVING THE REFRIGERATION INDUSTRY SINCE 1919

Airtemp Announces Davidson Appointment To Engineering Position

DAYTON — Appointment of John C. Davidson as assistant manager of application engineering of the

Airtemp Div. of Chrysler Corp. was announced recently by J. F. Knoff, Airtemp general sales manager.

Davidson joined Airtemp in 1947 as field engineer in the Minneapolis region. He held that position until his present appointment.

He is a graduate of the University of Minnesota, a registered professional mechanical engineer, and a member of the American Society of Heating and Ventilating Engineers.



J. C. Davidson

Trane Adds 7 Engineers To Local Sales Offices

LA CROSSE, Wis.—New appointments to Trane sales offices throughout the country were announced recently by Thomas Hancock, vice president in charge of sales for The Trane Co., manufacturer of air conditioning, heating, and ventilating equipment.

Walter T. Ritter, appointed to the Oklahoma City sales office. He is a graduate of the University of Illinois.

Loy Frank Thompson, appointed to the Greensboro, N. C. sales office. He is a graduate of North Carolina State university.

Allen L. Smith, appointed to the Columbus, Ohio, sales office. He is a graduate of Ohio State university.

George W. Shepherd, appointed to the New Orleans sales office. He is a graduate of North Carolina State.

Walter Lambert, Jr., appointed to the Pittsburgh sales office. He is a graduate of Virginia Polytechnic institute.

James Gledhill, appointed to the Newark sales office.

Murray W. Binkley, appointed to the Detroit sales office.

IDEAL Speed-Freeze PRODUCTS

BEVERAGE COOLERS AND
INSTANTANEOUS DRAFT
BEER COOLERS.
(With Refrigerated Faucets)

WRITE
IDEAL COOLER CORPORATION
2953 EASTON AVE. • ST. LOUIS 8, MO.

AIRO stands for

Complete stock of Refrigeration-Air Conditioning parts and supplies.
Speedy, dependable service when you need it... wherever in the world you want it.
New! Sectional Catalog saves you time. Write for your FREE copy, today!

AIRO SUPPLY CO.
2732 N. Ashland Ave. Chicago 14, Ill.



New, Multi-Purpose, Dependable, Fully Equipped RAPID DUZ-ALL Carbonic Gas SERVICE CYLINDER

Unequaled for pressure-testing lines, blowing out coils and condensers, inflating tires, extinguishing fires. Equipped with fire-horn, connecting hose, tire adapter, flare adapter, standard CO₂ charging connection for easy refilling. Durable, safe, economical 5 lb. CO₂ capacity. ICC 3AA-1800 Cylinder.

See Your Wholesaler

FINE PRODUCTS CO. 4837 S. WESTERN BLVD., CHICAGO 9
Design-Engineered for Rugged Service

Comfort Cooling for Autos

Chrysler Engineer Offers Recommendations for the Car Cooler, Suggests Changes In Location of Compressor and Condenser

DETROIT—Air conditioning of passenger car bodies by refrigeration, although now in about the same state of refinement as auto heaters were some 20 years ago, will without question "ultimately become a relatively economical and, therefore, highly demanded accessory," according to T. C. Gleason, head of Chrysler Corp.'s Fluid Dynamics Laboratory.

In the meantime, car cooling "may be expected to go through the usual growing pains," he said in addressing the national passenger car, body, and materials meeting of the Society of Automotive Engineers held here recently.

Some Methods Wrong?

Gleason criticized certain current practices—such as locating the condenser in front of the engine radiator—by way of introducing a set of recommendations for the car cooler of the future. He indicated that tomorrow's cooler might be a "completely self-contained package."

Application of refrigeration cooling systems to automobiles, he said, was started on a commercial scale about 10 to 12 years ago.

"The intervention of World War II nipped this enterprise in the bud," Gleason pointed out. "Following the war, very little interest was evidenced in refrigeration until recently."

"Small companies have now sprung up which assemble and install car coolers. The units used are mechanical vapor compression systems similar to those previously manufactured. In general, they consist of a belt-driven compressor mounted on the engine, a condenser mounted in front of the radiator, and an evaporator and blower unit installed in the trunk."

Point of Air Supply

"Air which has been cooled by the evaporator and blower unit is usually supplied to the car body at the back deck. The heat-laden air is usually passed under the back seat upon returning to the unit. In some units, provision for fresh air is included. These, of course, require an opening in the car body exterior."

"Forced fresh air is advisable in car cooling, not only to maintain an atmosphere of freshness, but also to pressurize the body so that hot engine air as well as surrounding outside air will not leak into the body."

Regarding the practice of locating the condenser in front of the engine radiator, Gleason said:

"The radiator is a very highly refined car component. Along with other car components, it has been studied and refined intensely for many years. The result is a finely-tuned and efficient arrangement of material which provides reliable trouble-free transportation as we all know it and want it."

"A condenser cannot be located in front of a car radiator without seriously upsetting the performance and reliability of a standard production automobile. The fact that such things are being done, and may continue to be done for some time, is an indication of the youthfulness of the enterprise in the field of passenger car refrigeration."

Gleason continued:

"This criticism of current practice is by way of introduction to a set of recommendations for the car cooler of the future. It is not implied that they could be accomplished at this time."

Compressor Location

"The compressor should not be located on the engine where it may affect balance and suspension, nor should the condenser be located in front of the radiator. Long refrigerant lines strung from the front to the rear of the car should be eliminated."

"The car cooler of the future now begins to take shape. It appears to be a completely self-contained package. If so, it will be a relatively trouble-free unit, built and tested before it leaves the factory. If it should need service, the entire unit could be removed from the car, thus permitting the latter to fulfill its primary function of transportation."

"In order to hasten the time of car cooling by refrigeration, some changes in present day conceptions might be undertaken."

Condenser In Trunk?

"The first and most beneficial step would be to move the condenser into the trunk along with the evaporator. Another helpful step would be to reduce the compressor size and weight by using light materials, high speeds—say 5,000 r.p.m., and dense refrigerants like 'Freon-22.'"

"With regard to these suggestions, the refrigeration engineer might well consider the difference in endurance requirements between passenger car application and commercial building or vehicle applications of refrigeration systems."

"There have been many discussions on the type of refrigeration system most suitable for car body cooling. . . . In an automobile cooling installation, the critical component is now and will be the condenser, its size, and its location. It follows that the type of refrigeration system most suitable for car installation will have the smallest condenser, or its counterpart."

"How does it come about that the condenser is subjected to all the criticism? Why not the evaporator?"

Condenser Capacity

"The condenser has to reject all of the heat that comes from both the evaporator and the compressor. For example, suppose the evaporator must absorb 18,000 B.t.u. per hour to cool the car. Then, in a mechanical vapor compression system, the compressor requires about 3 hp."

"The 18,000 B.t.u. per hour go into the refrigerant and so does the 3 hp. As the heat equivalent of 3 hp. is 7,600 B.t.u. per hour, the condenser must absorb a total of 25,600 B.t.u. per hour."

"Such a condenser would be about the same face size as an engine radiator and about half as deep. Furthermore, to do its job, the condenser must be supplied with about 900 c.f.m."

Compression System Best

"An examination of condenser or heat exchanger requirements will show that the absorption, steam ejector, or air cycle systems require two to three times the heat exchanger size of the mechanical vapor compression system. Therefore, it would appear that the mechanical vapor compression system is the type most likely to succeed in car body cooling application."

During his talk, Gleason supposed that an automobile ventilating system was designed to provide all desirable features. He then compared its cooling effect with that of an automobile equipped with a refrigeration cooling system.

"On an 85° day," he said, "a refrigerated car at 75° would feel from 3 to 5° cooler than a super ventilated

car. Passengers in the ventilated car would be fairly comfortable."

"On a 90° day, the refrigerated car at 78° would feel from 5 to 7° cooler than the ventilated car. Passengers in the ventilated car would be uncomfortable, but quite superior to the man on the street."

"On a 95° day, the refrigerated car at 80° would feel from 7 to 9° cooler than the ventilated car. Passengers in the ventilated car would

be miserably sweating, while passengers in the refrigerated car would be snugly comfortable."

Dill & Norris Handle Curtis Line In Northeast Miss.

COLUMBUS, Miss.—Dill & Norris Sheet Metal & Heating Co. has been appointed distributor for northeast Mississippi for Curtis air conditioning and refrigeration.

S. C. Market Air Conditioned

SPARTANBURG, S. C.—The Community Cash Supermarket on W. Main St. here, one of a chain operated by Littlejohn & Smith Co., has just completed the installation of Frigidaire air conditioning equipment.

Air Condition Harland Bldg.

ATLANTA—The building occupied by the John H. Harland Co., dealing in office supplies, printing, engraving, and lithography, is being air conditioned throughout. The two-story structure at 101 Cone St., provides some 15,000 sq. ft. of floor space.

Max Wright, Inc., local air conditioning concern, has the contract.

MISSING SOMETHING?

More and better useful information is yours for the asking. See "What's New" page.

Use Key No. for fastest service.

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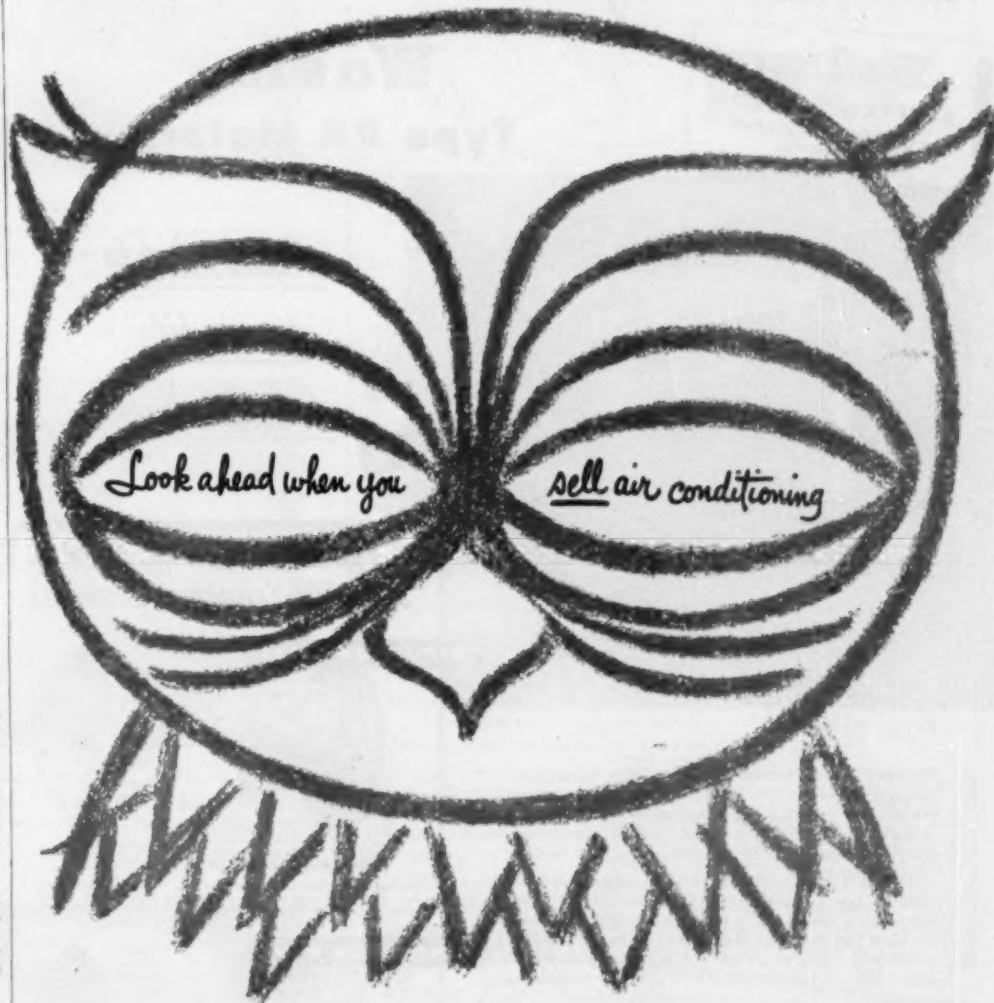


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Refrigeration Problems

and their solution

by Paul Reed

For Service and Installation Engineers



Paul Reed

Automatic Defrosting (6)

THERMOBANK

Another method of adding heat to the suction line, and which is one of the best known and most effective of the hot-gas defrost systems, is the patented "Thermobank." It can be used on almost any type of low temperature system and may be obtained in a wide range of capacities, and for single or multiple evaporator systems.

The name expresses one of the characteristics of the system, for provision is made for storing or banking heat during the normal refrigeration cycle, to be used as the supplementary heat during the defrosting cycle.

The Thermobank itself is essentially a combined heat-exchanger and suction line accumulator, within an insulated hold-over tank, as shown in Fig. 6. The suction line from the evaporator enters the side of the accumulator near the top, and leaves from the top of the accumulator in the manner usual with accumulators.

An oil drain line is provided at the bottom of the accumulator.

Around the accumulator is wound a coil through which, during the normal refrigeration cycle, the hot-gas from the compressor passes on its way to the condenser. The combined accumulator and hot-gas coil is submerged in an insulated tank of non-freezing solution. The solution concentrate is put in by the maker of Thermobank but water must be added to the proper height in the field.

During the normal refrigeration cycle, the hot-gas discharged from the compressor passes through the hot-gas coil in the Thermobank and gives up some of its heat of compression, thereby heating the solution in the Thermobank. At all times, during the refrigeration cycles and during the defrosting cycles, the suction gas passes through the accumulator.

Since the accumulator is warm, any liquid refrigerant that may stop over from the evaporator is re-evaporated, thus preventing liquid slugging by the compressor. Oil, returning from the evaporator, is not of course vaporized, but drops into the accumulator and thence back to the compressor crankcase via the suction

line. The Thermobank should therefore be mounted so that its oil-return outlet is slightly above the point on the suction line into which the oil-return line is topped.

THERMOBANK DEFROSTING

When the timer calls for defrosting, the solenoid valve in the hot-gas by-pass is opened, and since there is some pressure drop in the Thermobank and the condenser, the hot gas passes through the hot-gas by-pass to the evaporator just beyond the expansion valve, as in most hot-gas defrost systems.

But the suction line is still passing through the Thermobank, where it absorbs heat from the solution that was "banked" during the refrigeration cycle. In this way, the supplementary heat that is supplied to the suction line to keep the system from "running out" of heat during the defrosting operation, is actually not supplementary heat in the sense that it is supplied from without the installation, but is heat from the system itself, saved and stored up from the refrigeration cycle, and which would have been wasted by the condenser.

When the time allowed for defrosting has expired, the timer closes the

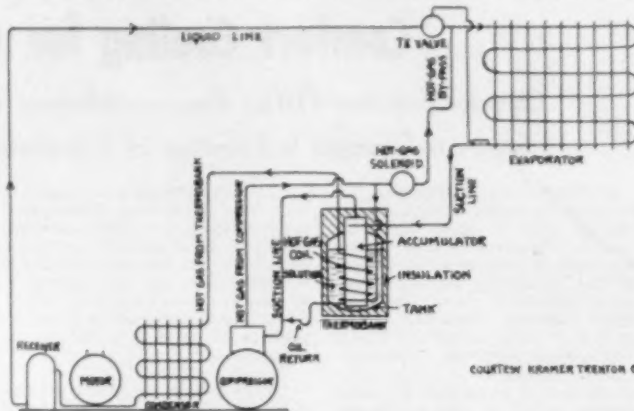


FIG. 6—Diagram of Thermobank.

solenoid valve in the hot-gas by-pass line and the hot gas from the compressor again passes through the hot-gas coil in the Thermobank, and heating of the accumulator and of the solution is resumed.

The liquid refrigerant that, during the defrost cycle, has accumulated in the evaporator from the hot-gas condensing in the cold evaporator, tends to surge back to the compressor when the hot-gas solenoid valve closes and the suction pressure drops sharply. However, it is caught in the accumulator and is gradually vaporized by the heat from the solution, which is again being heated by the hot gas from the compressor.

The Thermobank therefore:

- (1) Supplies the supplementary heat during the defrost cycle, so that it does not "run out" of heat.
- (2) Acts as an accumulator and re-evaporator at the beginning of the refrigeration cycle immediately following the defrost cycle, and thereby prevents liquid slugging by the compressor.
- (3) Requires no outside source of heat; but instead, banks and saves its own heat that would have been wasted anyway.
- (4) Assures proper oil return at all times.

ACCUMULATED TIME

Although control of the Thermobank is rather simple, as it requires only the hot-gas solenoid valve, the method of connecting the timer is quite unusual.

Instead of setting the timer to start defrosting at certain hours of the day—that is by elapsed time, its clock motor is connected in parallel with the compressor motor, so that the timer runs only when the compressor runs. The clock motor does not run during the normal "off" cycles between normal refrigeration cycles.

In this manner, the clock motor runs on accumulated time, or time accumulated during compressor operation. If, for example, the compressor runs only one-half the time between 12 noon and 6 p. m. (6 hours elapsed time) the clock motor of the timer runs only three hours (accumulated time).

There is a decided advantage in using accumulated time instead of elapsed time. The evaporator is coldest during the time when the compressor is in operation and refrigeration is going on. It is during this time that the evaporator is being refrigerated that frost accumulates on it; very little frost forms on the evaporator during the time the compressor is idle and the evaporator is not being refrigerated.

So accumulated time is a truer index of the amount of frost deposit on the evaporator than elapsed time, and is a truer gauge of the need to defrost than elapsed time. If the compressor operates most of the time, the evaporator will need to be defrosted more frequently than if it operates only a small part of the time.

Connecting the timer in parallel with the compressor motor, and thus gauging defrosting by accumulated time, automatically increases or decreases the frequency of defrosting as required. The standard setting of the Thermobank times is a defrost of six minutes every three hours of accumulated time. This may be re-adjusted for more frequent defrost if required.

A PATENTED DEFROST TIMING METHOD

It should be mentioned that connecting a timer in parallel with the compressor motor or in such other manner that it times defrost by accumulated compressor operation, is

a patented method, and may not be used on any defrosting system of any type without the permission of the Kramer Trenton Co., which owns the patent.

There are, of course, other features and details of operation and installation of Thermobank, but the foregoing is intended to give the basic information necessary to a proper understanding of this unique system.

DRAIN PAN AND LINE DEFROSTING

So far in this series on automatic defrosting, only defrosting the evaporator has been covered, for it is of course the main portion of the refrigerating equipment that accumulates frost and ice. Moreover, it is the chief piece of the equipment that produces the low temperatures that cause ice and frost building.

Nevertheless, there are other secondary parts of the equipment that require the application of heat to remove frost and ice or to prevent them forming. Of these the main ones are the drain pan and the drain line.

During the normal refrigeration operation of the low temperature equipment, there is not, nor should there be, any accumulation of ice or frost in the drain pan or drain line. In fact, in most low temperature equipment, there is little or no need at all for the drain pan and drain line except during defrosting. Then the drain pan must serve to catch the water melted from the evaporator, and the drain line must carry it out of the below-freezing space.

The heat from the evaporator during hot-gas defrosting is not intense enough to keep the drain pan warm; besides the drain pan is below the evaporator and any warmth that might be given off tends to rise.

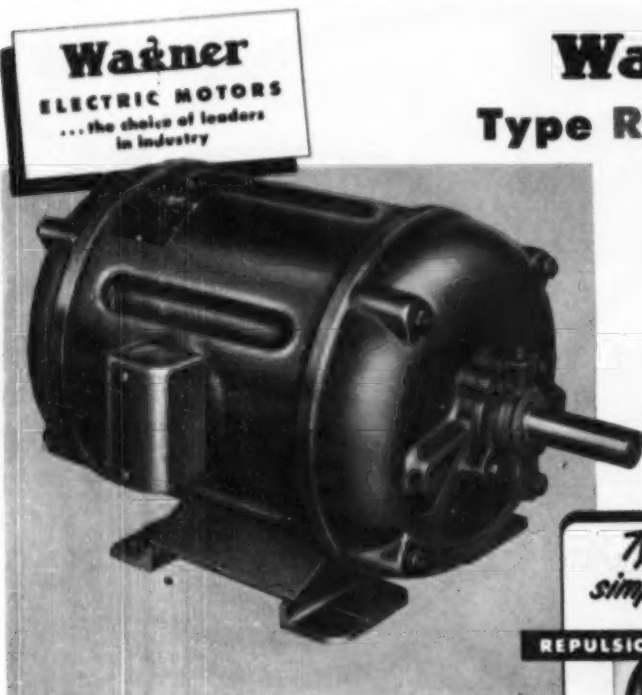
True, the water from the evaporator is above freezing, but usually it is only a very few degrees above 32°, and does not carry enough heat to warm the drain pan nor drain line. Both of these are at about the same temperature as the rest of the refrigerator, which is usually below 10°.

The tendency is for the water to freeze and build up on the drain pan. The drain line is usually more exposed to the low temperature than the drain pan, so any water that might not freeze in the drain pan will almost certainly freeze in the drain line. It is therefore necessary to supply heat to the drain pan and drain line as well as the evaporator, during defrosting.

In most hot-gas defrost systems, the hot-gas by-pass line is first soldered to the drain line, then a loop of it is soldered to the drain pan and finally it passes to the evaporator.

In this way, the drain line is heated first, then the drain pan, and finally the evaporator, thus assuring that the water melted from the evaporator will remain water, while it is caught by the drain pan, and carried out of the cold area by the drain line.

(To Be Continued)

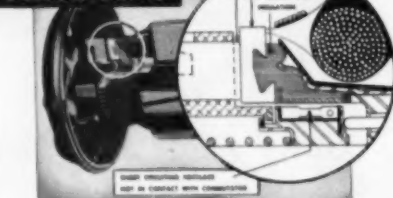


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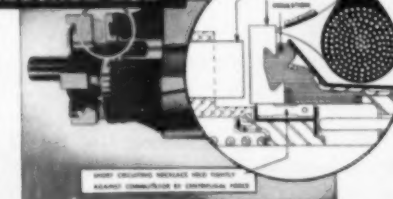
Type RA offers the most simplified design to provide:

REPULSION START



Starting period—Short-circuiting necklace is not in contact with commutator bars. A governor spring holds barrel in starting position. Brush assembly completes selected circuit enabling motor to start as a repulsion motor.

INDUCTION RUN



Running period—Governor weights (actuating pushrods) have forced spring barrel forward until short-circuiting necklace contacts commutator bars to short-circuit ring, forming a "spiral cage" to permit operation as an induction motor.

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Picture Report of Philadelphia Conference



SEVERAL NEW FLANGE type driers of different sizes were taken apart for visitors of the Henry Valve booth to show new design of the bulk refill type units.



DESIGN OF CHECK VALVE employing "lips" made of new synthetic rubber is described by officials of Sealed Unit Parts—Frank Lewitz, vice president; Henry Ehrens, president; Sidney Weiner, secretary—to E. Casper, New York City contractor.



OPERATING AND CONTROL CYCLES in both time-pressure and hot gas and electric defrost systems were graphically illustrated on display boards in Penn Controls booth. Ken Cash (second from left) of Penn Controls points out some of the operating features to a visitor.



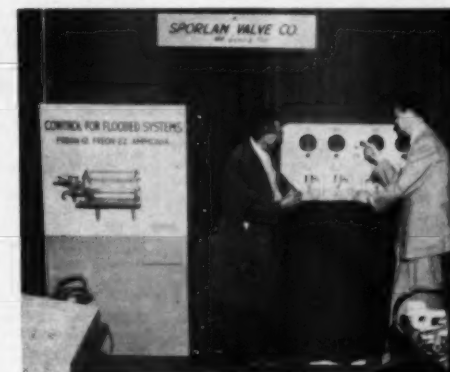
PROBLEMS OF PRESSURE drop and suction control encountered in field are duplicated on this operating system by Alco Valve and explained to servicemen and contractors.



ACTION OF CONTROL ELEMENTS in a refrigeration control is explained by Dean Eggert (right) of White-Rodgers Electric Co. to a conference visitor. Device was only a part of exhibit which covered principles and functions of temperature-operated and pressure-operated controls.



OPERATION OF BRUNNER'S compressor capacity control as demonstrated by working cutaway is explained to contractor Phil Conrad and Mrs. Conrad of Hatboro, Pa. by Frank Hawk.



DEMONSTRATION BOARD to show factors affecting solenoid valve selection and operation is explained by W. F. Wischmeyer (right), chief engineer of Sporlan Valve Co., to an interested visitor.



CARBONATION IN ACTION was demonstrated by Temprite Products Corp. with Jim Archibald (center) explaining what is happening as the demonstration goes on.



MINIATURE OPERATING air conditioning system devised by Detroit Lubricator Co. permitted representatives to demonstrate and explain various factors affecting expansion valve operation.



DEFROSTING SYSTEM for commercial evaporators draws a throng at the Larkin Coils exhibit, in which an operating model of the company's "Frost-O-Trol" hot gas defrost system was in operation.



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New Exhibits Mark Educational Show--

(Continued from Page 1)

Hammer, Inc., and "The 1951-1952 American Standard Safety Code," by Myron D. Miller, executive secretary, Refrigeration Industry-Safety Advisory Committee.

In the short essay contest among those attending telling which exhibit had been most educational and why the writer had considered it such, first prize, a television set, in the awards donated by Refrigeration Equipment Wholesalers Association went to Al Young, A & B Service, Stamford, Conn. Second prize, an electric toaster, was won by Owen Heaton, Heaton Refrigeration, Philadelphia; and third prize, a radio set, went to Frank J. Dice, Frank J. Dice Co., Perkiomenville, Pa.

Also Valve Co. received the REWA plaque as the exhibiting manufacturer receiving the most mentions in the contest, with second award in this category going to Mueller Brass Co., and third place to Detroit Lubricator Co.

Philadelphia RESE men who were in charge of arrangements for the conference included Morris Silver, general chairman; John Locicento, co-chairman; Daniel Cella, conference secretary; Harry J. Dunbar, in charge of banquet and entertainment, assisted by Daniel Cella and Haden Hamon; M. Wildesen, in charge of reception and registration, assisted by John Babich, Frank Stenton, and Rocco Guerriero; Herman Marks, in charge of housing, assisted by Julian Clemens and Roy Dracoll; and John Locicento, in charge of the program book, assisted by Bruno Restito, L. B. Sheldon, and Philip Belbeck.

What the Exhibits Showed

VALVING FOR CONDITIONERS

How expansion valves operate under varying conditions was ably demonstrated by Detroit Lubricator Co. with its exhibit built around a miniature air conditioning system.

By means of a valving arrangement to control refrigerant flow it was possible to show on gauges what actually happens, for example, when gas flashes in the liquid line before reaching the expansion valve. This can take place, servicemen were told, on long vertical runs when no provision is made to avoid it.

DEFROST SYSTEM WIRING

Piping and wiring sequences for a time-pressure defrost system and a hot gas and electric defrost system were graphically demonstrated in the educational display of Penn Controls, Inc.

By means of colored lighting and flow indicators, these demonstration boards gave a graphic portrayal of the control cycle and refrigerant flow in the defrost cycle.

'HOLD-OVER' VENDING CABINET

Focal point of the Kold-Hold Mfg. Co. exhibit was the demonstration of its new "hold-over" vending cabinet, providing mobile refrigerated vending without the use of dry ice.

This cabinet is designed to be mounted on a motor scooter or side car for street vending, or for delivery by pick-up truck to corner vending stations or ball games or picnics, or for the transportation of



USE OF A REEVAPORATOR COIL in a hot gas defrosting system occupies attention of group of conference attendees examining the operating model of Bush Mfg. Co.'s "Therm-O-Cycle" defrosting system.

ice cream and frozen foods.

Constant low temperature of the cabinet are maintained by the "stored" refrigeration of "hold-over" plates. During off hours, cabinets are connected to a central ammonia or "Freon" cooling system at the home plant through flexible make and break connections. This builds a charge of "flint" ice within the "hold-over" plates sufficient to maintain 0° F. temperatures in the cabinet for 10 to 12 hours. The make and break connections are then broken and the vending cabinet becomes a mobile unit that can be used anywhere without further attention or servicing.

PURGING & CHARGING VALVE

How its purging and charging valve works, and how its liquid indicator is hooked up and used in actual installations, was featured on the display board in the Imperial Brass Mfg. Co. exhibit.

In the demonstration the magnifying qualities of the Imperial liquid indicator was clearly brought out.

Driers, gauge sets, and line valves were also demonstrated in the display together with the latest models of Imperial cutting and flaring tools for copper tubing.

ACTION IN A CONDENSER

Both its stainless steel evaporator and its shell and coil condenser were shown in the single operating display maintained by Standard Refrigeration Co.

Gauges and thermometers showed pressures and water temperatures, and visitors to the educational conference got a view of the "inner workings" of the shell-and-tube condenser by means of a "magnifier" placed over a glass section of the unit, the magnifier being like those used in television sets installed in commercial establishments.

HOW TO MAKE JOINTS

Shown on large easel display boards by Mueller Brass Co. were step-by-step instructions—with various tools, materials and accessories placed right on the board—"How to Make a Silver Brazed Joint" and "How to Make a Soft Solder Joint."

Also in the exhibit was the well-

known but continually improved "operating cycle" display showing the course of refrigerant through a system by means of the use of transparent refrigerant coils and tubing.

WHEN THE OIL IS BAD

An emphasis of the proper use of correct refrigeration oils in a refrigeration system marked the Ansul Chemical Co. exhibit.

A lighted display board showed where and how oils cause trouble in certain spots in the refrigeration system, and specimens of various oils were shown to demonstrate characteristics of oils that are fit for use in a refrigeration system.

HERMETIC SERVICE KIT

Hermetic valve service kits, plus cutaway models of valves, refrigeration manifold assemblies, sight glass indicators, and other accessories marked the display maintained by Kerotest Mfg. Co.

DEFROSTING IN ACTION

A scaled-down model of its "Frost-O-Trol" automatic hot gas defrost system was spotlighted in the educational exhibit set up by Larkins Coils, Inc.

By means of the use of lights and various instruments the model showed what happens during the various stages of the defrost cycle.

RECORDING INSTRUMENTS

Proper application of a wide variety of temperature and pressure indicating and recording instruments was emphasized in The Electric Auto-Lite Co. exhibit.

Personnel manning the exhibit described the functions and proper use of temperature recorders, pressure recorders for use with compound gauges, dial indicating thermometers with electrical alarm contacts, thermometers for beer coolers, and thermometers for frozen food merchandising and storage cabinets.

CARBONATOR CARBONATING

A visual demonstration of how a carbonator "carbonates" was featured in the Temprite Products Corp. exhibit.

By means of a transparent model the "action" in the carbonation process was demonstrated, and samples of the beverage that was carbonated were drawn off and served to the visitors.

CAPACITY CONTROL PURPOSES

A cutaway model of the Brunner capacity control for compressors was the focal point of attention in the Brunner Mfg. Co. booth.

By means of line gauges connected to this demonstration setup, Brunner personnel in attendance were able to show the various purposes of the control, such as matching the pumping capacity of the compressor to the changing demands of the system, and decreasing the effects of voltage fluctuation.

Also in the exhibit were cutaway models of Brunner compressors.

EVAPORATOR TAKEN APART

Betz Corp. unit coolers, finned evaporators, and other products were literally "taken apart" in the Betz educational exhibit to demonstrate the type of components used and how they fit into the finished product.

(Concluded on Page 31, Column 1)



PUMPING ACTION of a Servel hermetic compressor under all types of conditions is observed in left foreground in a display showing assembly of items for checking some of the electrical factors in the servicing of hermetic units. In left background can be seen Wagner Electric Corp.'s motor panel which demonstrated operation of motors under fluctuating voltages and overload conditions.

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$5.00 per insertion. Limit 50 words. 10¢ per word over 50.

RATES for all other classifications \$7.50 per insertion. Limit 50 words. 15¢ per word over 50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count. Please send payment with order.

POSITIONS WANTED

SALES EXECUTIVE will be available after June first. Qualifications: merchandising and product promotion; heavy experience in refrigeration, air conditioning and heating; ability to handle, train and get along with people; extensive compressor experience; national following of wholesalers, distributors and manufacturing representatives; very aggressive; ability to assume heavy responsibilities. Financial remuneration must be in accordance with abilities. BOX 3991, Air Conditioning & Refrigeration News.

SERVICE ENGINEER with 27 years' experience in commercial and industrial refrigeration, air conditioning and heating, up to and including 300 ton systems. Wants permanent connection with company in southern Florida. At present, service manager for one of Chicago's leading contractors. BOX 3992, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

ENGINEER, ELECTRICAL or mechanical. Unique and interesting permanent job supervising NYC lab engaged in testing and evaluating home appliances. Minimum 10 years' experience, including supervisory exp. Salary open. Send resume including salary desired, to BOX 3994, Air Conditioning & Refrigeration News.

SALES ENGINEERS—Nationally known manufacturer of automatic controls for heating and refrigeration has excellent opportunity for 2 experienced sales engineers—one location southeast—one middle west. Write full details experience and qualifications with photo to BOX 3987, Air Conditioning & Refrigeration News.

SALES REPRESENTATIVE. Substantial, well known, quality manufacturer of sectional walk-in coolers and freezers, and reach-in ice cream and frozen food cabinets has several open territories. Please write listing other lines and territory covered. BOX 3988, Air Conditioning & Refrigeration News.

WESTERN MICHIGAN distributor for leading air conditioning and refrigeration manufacturer in need of sales engineer with experience. We have many leads coming in and can offer advance, expenses and a substantial income. Must be a self-starter and an aggressive salesman. BOX 3993, Air Conditioning & Refrigeration News.

EQUIPMENT WANTED

WANTED NEW 1/2 to 1 1/2 ton air conditioners. Please wire or write giving name, year, model and serial number and best cash prices. N. R. NORTHCUTT MFG. CO., 415 South Oakes St., San Angelo, Texas.

EQUIPMENT FOR SALE

HERE'S YOUR chance to make a buy, limited quantity. 5 ton - 4 row - air conditioning coils - with expansion valves, each \$69.50. 12 inch D. I. D. W. blowers for vertical mounting, including pulley, each \$15.25. All merchandise guaranteed and sold only on a be satisfied or your money will be refunded. AIR CONDITIONING ENGINEERING CO., 2116 Locust Street, St. Louis 3, Mo.

NEW—1/2 and 1/4-hp. open type refrigerating units, air cooled. Price: 1/2 hp—\$84.24; 1/4 hp—\$102.00. These units are equipped with Chieftrain compressor bodies and Century capacitor type motors with built-in thermal protection. Freight allowed on quantity orders of 10 units or more, may be assorted sizes. Write for literature and specifications. ARCTIC-AIRE, 1621 Grand Ave., Kansas City, Mo.

REFRIGERATOR DOORS, 36" by 66" double batten auto close doors complete with removable track heads for a 72" track. 1 1/4" corkboard insulation. 16 gauge metal clad. Brand new. \$95.00 each. Freight prepaid in U. S. Door height will be altered for anything up to 11 ft. 2 in. track for \$15.00 additional. BIMEI CO., Cincinnati, Ohio.

FOR SALE—80 ton cooling equipment as follows: with magnetic starters and automatic controls; 2 Frick 4 cylinder Freon compressors 4 1/2 x 4 1/2 Model F.W.-440; 2 40 H.P.M. motors; 5 Aero fin coils, 4 pipes deep, 18 pipes high 81" x 26"; 1 80 ton Buffalo fan 33" x 42" delivery 20,000 C.F.M.; 3 new American coils model 20300. BOVAL REALTY CO., 312 38th Street, Union City, New Jersey.

352 BUYS standard brand 1/4-hp open type or sealed type complete units. Other sizes up to 3 HP. Write for complete listings on units and parts, including Kilzon overload relays @ 15¢. MANN REFRIGERATION SUPPLY CO., 440 Lafayette Street, New York 3, N. Y.

SACRIFICING 18 cu. ft. display freezers with superstructure and Thermopane glass sliding doors. Only \$371 each, f.o.b. New York. List price \$714. For complete details, write or call MANN REFRIGERATION SUPPLY CO., 440 Lafayette St., New York, Gramercy 3-8000.

BRAND NEW industrial thermometers of popular make 30° to 200° F. 9" scale straight & 90 deg. back angle 3/4" & 6" stem air-dust & socket type ea. \$5.75. 6-9/16" scale submarine type 3/4" stem with socket, 90 deg. back angle 40— to 110° F. ea. \$6.75. 6—recording thermometers 25— to 230° F. models 75-J-168 & 340 MF ea. \$75.00. R. & R. EQUIPMENT CO., 2724 Third Ave., Bx., N.Y.

FOR SALE—brand new 1/4 H.P. hermetic compressors. Model 8-88-8 1/2" high. Complete with relay and overload \$44.50. Send for your list on driers, valves, belts, pressure controls, fittings, relays. Supplies and parts at great savings. Sold on money back guarantee. WALTER W. STARR, 2833 Lincoln Ave., Chicago 13, Illinois.

STOCK CLOSE-OUT. Brand new; not salvaged, damaged or distress merchandise. 8 Brunner A15FC & 8 Copeland 25 AFC compressors each with 1/4 hp motor complete; 7 Temprite F2W & 8 Heatex HX-10 ERI cast aluminum Freon cooling units complete; 5 Temprite 227-1 cabinets; 8 Temprite 21 equalizer tanks; 6 Temprite #101 oil separators; 9 Temprite #4 adaptor blocks. All in original factory containers; never used. Submit offer for all or part now! VOIGT, 1649 No. Broad St. Philadelphia 22, Pa.

BUSINESS OPPORTUNITIES

ESTABLISHED COMMERCIAL refrigeration & air conditioning business for sale. Distributor for nationally known lines. Inventory approximately 10,000 plus trucks, tools & equipment. In the northwest, west of the Rockies in city of 150,000 population. Reason for selling, health. 1951 sales \$125,000. BOX 3979, Air Conditioning & Refrigeration News.

APPLIANCE AND commercial refrigeration business for sale. Growing community, forty miles from San Francisco & Oakland. Leading brand franchises only. Excellent year 'round climate. For further information, write BOX 3983, Air Conditioning & Refrigeration News.

FOR SALE: General appliance and commercial refrigeration and service business. Frigidaire and other top franchises. Leading appliance store in trade area of 15,000 population. 55% electrified. Prosperous farming community in southwest sunshine belt. Store has 50 foot front and is across from post office. Corner location. BOX 3989, Air Conditioning & Refrigeration News.

FOR SALE—Long established butcher supply and equipment business in southwestern New York and northeastern Pennsylvania. Hussmann Refrigeration, U. S. Slicing Machine Co. and Bulman Franchises, plus complete line of butchers' and grocers' supplies. Must sell on account of old age at inventory price. Approximately \$10,000. Write BOX 3990, Air Conditioning & Refrigeration News.

MISCELLANEOUS

NORGE SEALED units remanufactured or exchanged. Immediate delivery from stock. 2 year warranty. Freon refrigerant. Write for prices and shipping instructions. Genuine Norge terminals for Norge sealed units. Set of three, \$1.15 plus postage. MODERN REFRIGERATION CO., INC., 12541 E. McNichols Road, Detroit 5, Michigan.

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LOTS OF ACTIVITY in the Mueller Brass Co. exhibit, where Bob Gibbs (far left), Paul Domke (center), and Fran House (second from right) are busy answering questions or explaining the function of various products to conference exhibit attendees.

Exhibits Aid Installers, Servicemen--

(Concluded from Preceding Page)

'RUBBER LIP' CHECK VALVE

Operating cutaway of its new "Bullet" check valve for domestic and commercial applications was featured by Sealed Unit Parts Co., which had the valve installed in a household hermetic system.

Valve mechanism consists of two rubber "lips" which open to let refrigerant pass through when the unit is running but immediately seal tightly when the machine stops and the pressure stops up, the company explained. This action could be observed through a plastic section of the valve housing.

Rubber used is a new type synthetic which can be used with any type refrigerant and will not react with any acid, it is claimed. Because of its construction, the valve may be installed in any position, has no seat, disc, ball, or reed.

CHECKING MOTOR OPERATION

To demonstrate the effect of motor overloading and voltage fluctuations, and to show how present-day electric motors for refrigeration equipment operate under these and other conditions, Wagner Electric Corp. presented a special operating display setup which produced the varying conditions.

By means of this display Wagner is able to demonstrate operation of refrigeration-type motors under such conditions, and to show through voltmeters, gauges, and other instruments just what happens in the electrical circuit and also in the refrigeration system.

WHERE VALVES, FITTINGS FIT

A new and unusual display and demonstration board designed to show just where its various products fit into the refrigeration system was featured by Superior Valve & Fittings Co.

While the various major components of the system (evaporator, condensing unit, refrigerant lines) were painted onto the background in various colors, the actual Superior Valve products were inserted right into the painted backgrounds in the actual spots in which they fit into the system.

Products shown in this manner included line valves, fittings, heat exchangers, sight glass indicators, driers, check valves, and pressure relief valves.

Also in the Superior display was a demonstrating setup of its rapid charging refrigerant-transfer setup.

WHAT AFFECTS SOLENOID VALVES

Graphic demonstration of how low voltage, improper port size, or a hot (overheated) magnetic coil will affect the operation of solenoid valves was provided by Sporian Valve Co.

Display board had four manually controlled solenoids, each of the same coil size. Three valves, however, had different size ports: $\frac{1}{8}$ in., $\frac{1}{4}$ in., and $\frac{3}{8}$ in., while the fourth had a $\frac{1}{2}$ -in. port but the coil was heated.

All four valves were operating under air pressure, which could be varied over a considerable range and shown on individual gauges. Voltage likewise could be changed.

Sporian's aim was to show that for a given valve and solenoid coil, the Maximum Opening Pressure Differential (that is, highest pressure difference on each side of the valve under which the valve would open every time) depends on the port size, voltage, and coil temperature.

At 15% of rated voltage, or approximately 95 volts, the valve with the smallest port would open under much higher pressure than those with the two larger ports, or the valve with the "hot" coil. Likewise the overheated coil has less power to

overcome pressure than a solenoid which has not become hot, it was shown.

'BLEED-OVER' VALVE ACTION

A graphic demonstration of how its bleed-type automatic expansion valve serves to provide "bleed-over" or compressor unloading on the off-cycle was provided in a new operating display set up by A-P Controls Corp. at the educational exhibits.

By means of pressure gauges and an operating system A-P Controls was able to show just how the "bleed-over" function serves to balance out pressures and provide the unloading feature during the off-cycle.

Other features of the valve, designed for fractional tonnage applications, were demonstrated. Among these are instant cooling on start of normal cycle, adjustability to prevent motor overload due to high suction pressure, and automatic valve opening to pass foreign material which might collect at the orifice.

RE-EVAPORATOR IN DEFROSTING

An operating display complete with all component parts was used by Bush Mfg. Co. to show just how its "Thermo-O-Cycle" hot gas defrosting system operates in practice.

The "Thermo-O-Cycle" setup consists of a conventional commercial refrigeration system utilizing room air passed over a re-evaporator coil to furnish the heat required for defrosting.

By means of the operating display Bush Mfg. Co. personnel were able to demonstrate just how the re-evaporator functions, and how the entire system with hot gas defrost operates in fully automatic fashion.

Operating model is also designed to show simplicity of installation, and ease of servicing.

DRYING -30° CAPILLARY

By means of an ingeniously designed evaporator, McIntire Connector Corp. was demonstrating how it is possible and also a "must" to completely dry through one pass through its DFN moisture control unit, refrigerant that is to pass through a capillary tube operating at an evaporator temperature of -30° F.

Designed by M. J. Meiklejohn, the evaporator in which are produced seemingly impossible operating pressures was baffling the leading engineering talent at the conference, as it has service and installation men in the field. The operating setup has been used for field demonstration work.

DRIERS FOR BULK REFILL

At the Henry Valve exhibit there were some new driers of flange type construction designed for bulk refill. Larger models are available with flanges at each end for easy removal from the line. This is aided, too, by using a serrated flange surface and flat gasket instead of the conventional tongue and groove design.

A new development in flange type refillable driers was also being shown by Henry in 2-in. diameter model. The "flange" is on the inside of the shell, the design saving considerable metal besides requiring fewer bolts and a smaller diameter gasket. Because it is smaller, the gasket provides a better seal, Henry believes.

3-IN-1 HEAT-X DEMONSTRATOR

A cleverly constructed "all in one" demonstration hook-up permitted Heat-X-Changer Co., Inc. to give an operating demonstration of three of its principal products—the remote air-and-water cooled condenser, the heat interchanger, and the cast aluminum water cooler.

While functioning as an integrated

system and thus permitting consideration of these three products, the demonstrator was operated primarily to show the water-saving features of the air-and-water cooled condenser.

CHECKING PRESSURE DROP

Such important problems as pressure drop and suction control were demonstrated for servicemen and contractors at the Alco Valve Co. booth where a small but complete refrigerating system incorporating a number of expansion valves and solenoids was on display. Gauges and manual controls permitted various conditions encountered in the field to be simulated and explained by this system.

WHEN VOLTAGES FLUCTUATE

In a special operating display Servel, Inc., manufacturer of commercial refrigeration units, showed how motor operation could be protected and the system can be kept operating where low voltages are encountered, by varying the expansion valve charge. Continued operation is thus permitted without cutting out the machine even though the motor is overloaded.

The operating display also demonstrated how raw liquid refrigerant can be pumped through a Servel hermetic unit without causing serious damage to the unit.

HOW CONTROL ELEMENTS FUNCTION

Large "blow-ups" of pressure and temperature controls, in exactly scaled dimensions and so arranged as to permit a simulation of actual operation, were used by White-Rodgers Electric Co. to demonstrate the manner in which such controls operate.

Also shown was a display of con-

trol elements, so designed as to show the action of the elements on the control diaphragm. Visitors were also told how to obtain data available from the Service Information Division of White-Rodgers.

COOLING A REACH-IN

With one of its reach-in refrigerators cut away to show the "insides" of the construction and vital parts, Jordan Refrigerator Co., manufacturer of Jordan commercial refrigerators, demonstrated how its "Jord-O-Matic" cooling system operates.

In this system a high velocity air circulator located at the top of the cabinet pulls air from the cabinet into the coil chamber above it. This air travels over a large coil area, and then spills down into the food storage area through openings at the side, at a relatively low air velocity.

Jordan claims that the cooling is large enough to be wet with condensate at most times, so that air traveling over the coils actually picks up some moisture content, rather than drying out the air.

EASY-READING THERMOMETER

Advance models of its redesigned and re-engineered "Serviceman" thermometer line, which probably won't be available until the middle of July, were being shown here by Marsh Instrument Co. This has a dial with black background and white figures to make it more readable, a hairline pointer, and molded plastic crystal to insure against warping or loosening.

Recalibrator screw has been relocated in back of case, making it readily accessible. All joints formerly soldered are now brazed; bourdon tubes are stress-relieved for longer life.

New Aids for Field Work

In addition to cutaways and operating models which they had exhibited at previous shows, a number of manufacturers were also introducing new or redesigned products or other aids for servicemen.

LISTING OF OLD CONTROLS

Cutler-Hammer, for example, has prepared a new catalog which lists by number every domestic and commercial refrigeration control it has ever produced. This shows the original application of each control, and, where the control is no longer manufactured, the model that should be used as a replacement.

ADJUSTABLE COMPRESSOR RACK

On display at the Fine Products Co. booth was a new "Spacesaver" adjustable compressor rack which permits two units to be mounted one above the other while keeping both off the floor. Claimed to save installation time and be more economical than home-made racks, this rack is of heavy angle-iron construction with platforms and unit rails that can be adjusted to accommodate 90% of all units installed, the company says.

Also new at the Fine booth was a gas torch lighter that has two extra flints mounted on the lighter itself and a round file that can be revolved to prolong its life.

FOR VARYING VALVE CAPACITY

General Controls included in its display two new expansion valves being added to its line. These were the V200G 2-ton valve and the V200H 3½-ton valve featuring combination internal and external equalizers and adjustable orifices for varying the valve capacity.

YOU PAY LESS TO BUY!

Get the price on the Chevrolet truck that's the right size, type and capacity for your work. You'll find that it lists for less than any other truck capable of doing the same job. Chevrolet has the lowest priced line in its field.

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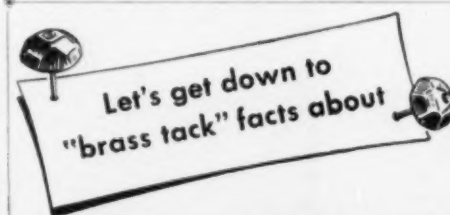
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duty models • **CAB SEAT**—with double-dash springs for complete riding comfort • **VENTILATION**—for improved cab ventilation • **WIDE-BASE WHEELS**—for increased tire mileage • **BALL-TYPE STEERING**—for easier handling • **UNIT-DESIGNED BODIES**—for greater load protection • **ADVANCE-DESIGN STYLING**—for increased comfort and modern appearance.

CHEVROLET DIVISION OF GENERAL MOTORS, DETROIT 2, MICHIGAN



Freezer Sales Near Top In Some Areas--

(Concluded from Page 1, Column 5) is advocating and listed conditions he considers objectionable in many current food plans.

The Bureau of Home Appliances of San Diego County announced that it will sponsor an educational and informational clinic covering all important phases of the freezer-food plan. The meeting will be held the afternoon of May 15 in the Electric building, San Diego.

Viewpoints will be presented by banks and financial agencies carrying freezer-food paper, the Better Business Bureau, advertising media, the local frozen food locker association, retail markets, and concerns engaged in the plan in San Diego.

DISTRIBUTOR DEFENDS PLAN

In San Francisco, freezer-food plans were defended by a Coolerator distributor at a meeting attended by dealers and representatives of the local OPS office, banks which are financing freezer-food plan sales, and the Better Business Bureau.

Declaring that "there is always opposition to the new, but you can't stop progress," George Hornstein, president of Pioneer Appliance Co., told the gathering:

"Those who fight always claim they are losing business that belongs to them. But they forget that they must earn the right to claim business as their own."

"Grocers claim the frozen food business belongs to them. However, statistics prove that for every cubic foot of frozen food storage space in retail food stores, there are 20 cu. ft. in homes."

"Appliance dealers claim the freezer business belongs to them, but because they were either afraid, too lazy, or inadequate in aggressively displaying, selling, and pursuing freezer sales, they let the market slip away from them."

IT'S NOT TOO LATE FOR APPLIANCE DEALERS'

"It is not too late. Appliance dealers can still earn the right to sell freezers if they get on their toes."

Muriel Tavetkoff, general manager of the San Francisco Better Business Bureau, discussed misrepresentations which she said her office has discovered in some freezer-food plans. These include short weight deliveries, misleading price quotations and descriptions of meat grades, and improper use of the word "wholesale."

Mrs. Tavetkoff urged dealers to adopt voluntarily a 10-point standard of advertising practices proposed by the bureau to eliminate "sharp practices."

BOSTON BBB WARNS AGAINST MISLEADING ADS

The Better Business Bureau in Boston also cautioned all concerned with freezer-food plans in that area to avoid use of misleading statements.

Among other things, the bureau warned that tie-in sales under which the customer is required to buy a freezer in order to obtain food at offered prices violates OPS regulations. The bureau also pointed out that claims of savings sometimes compare the quantity purchase price with the retail price on retail units of food.

This disregards the fact, the BBB declared, that "retail prices during special sales by retail stores may be as low as prices in a freezer-food plan."

In Memphis, a new plan is being offered by A & M Wholesale Food Club. As one means of promoting the program, the operators will give \$10 in cash or a silverware gift to each person who furnishes the name of a prospect, provided the lead results in a sale.

A & M offers frozen food indefinitely at "wholesale prices" to those who purchase Amana freezers. It sells both the freezer and a minimum of \$100 worth of food directly to the consumer. A & M secures meat from a local packer and other frozen foods from wholesalers at present but plans to build a meat processing plant and hire its own butcher.

Television was being used in the Toledo area to promote a plan being sponsored by Commercial Electric Co., General Electric distributor, and four dealers. At two locker plants, participating as food sources, customers can get a 10% discount for purchases by the dozen packages.

In Salt Lake City, the Darling Store took a poke at the many advertisements offering big savings on

food by stating in an ad of its own: "You can save 100% on your food budget—if you stop eating." Other copy said, in part:

"We're not magicians, Mrs. Housewife, but we'll show you how you can actually earn this modern up-right freezer and eat better than ever before."

The store promoted a Manitowoc freezer and a food plan offering nine months' supply of food for \$6 a week.

BOOK ON FREEZER-FOOD PLAN

And for those who don't know how to go about organizing a freezer-food plan, there's a new book out giving all necessary information. Priced at \$2.50, the book is called "The Food-Freezer Plan" and is authored by two food plan merchandising veterans—Robert Harnish, Pacific Coast district manager for Deepfreeze, and David N. Reid, sales representative for Frank Edwards Co., San Francisco distributor.

The book can be obtained from Harnish and Reid, Room 463, Western Merchandise Mart, 1355 Market St., San Francisco 3, Calif.

In his statement, Sorensen of Deepfreeze noted that actually, "there is nothing new about these plans."

'FREEZERS AND FOOD LOGICALLY GO TOGETHER'

"Boiled down to their simplest terms, they mean that home freezer retailers are making it possible for consumers to buy at reasonable prices the food their freezers are intended to preserve. Freezers and food logically go together, and retailers have been offering food plans of one kind or another for years."

"What is a new development in this basic merchandising idea is that a source of food has been opened up for the consumer by the retailers of home freezers and methods advanced whereby financing can be applied to both types of purchase."

He is sure that there is a limitless sales possibility for both industries due to this "marriage" of their common interests, as long as clear and honest dealings with the consumer control the food-freezer plans, just as they have controlled the operations of the two industries in their individual operations.

FIVE OBJECTIONABLE CONDITIONS IN FOOD PLANS

Sorensen lists five conditions which he considers objectionable in many current food plans.

1. Selling the home freezer above the OPS established price.
2. Advertising wholesale prices on food, when in reality the prices are not wholesale.
3. Advertising 35 to 40% savings on food purchasing, which is not possible. He thinks a 15-20% saving is a more realistic figure.
4. Substituting sub-standard frozen foods for high quality brands.
5. Confusing the public into believing that they are obtaining a home freezer free.

Asked about the type of food plan which his company is advocating as a sensible and practical freezer-food plan for its distributors and dealers to install, Sorensen said:

"We are confident that this plan will be soundly established and sensibly maintained by our retailers on a good business basis. This plan clearly states the cost of the freezer, the cost of the food, and the cost of the financing so that the consumer can decide, on its merits, whether the plan is acceptable. We intend to do everything in our power to keep our freezer-food purchase plan on the high level at which it has been organized."

Shield Handles Perfection Line In Parts of Texas

CLEVELAND—Perfection Stove Co. announced the appointment of The Shield Co., Inc. as its distributor in Fort Worth and central, west, and southwest Texas.

Shield has operated in Texas for the past 27 years. This distributor, whose facilities include more than 100,000 sq. ft. of floor space, also handles Victor frozen food storage units, Arvin radio and television sets, and furniture and floor coverings.

The firm is headed by W. W. Slaughter as president. Other officers are E. C. Miller, vice president and general manager; Richard Owens, secretary-treasurer, and C. V. Cotton, sales manager.

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-SECRET OF DOLE SUPERIORITY

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